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ABSTRACT

This report uses data from the 1989 National Health Interview Survey to estimate health insurance coverage of children and nonelderly adults with disabilities and their utilization of physician and hospital care as a function of health insurance status. In part 1, national statistics on disability and insurance status are provided for different measures and categories of disability. Estimates of the percent of the population with various types of insurance coverage or with no insurance coverage are provided by sociodemographic and disability status. In part 2, logistic regression models controlling for sociodemographic factors measure the impact of insurance on utilization of health services. In part 3, the relationships of poverty, employment, and disability with private insurance, public insurance, and no insurance are examined in the context of policy options. Among highlights of the report's findings are: (1) an estimated 11.5 percent of the 35.3 million uninsured people in the United States have some activity limitation; (2) adults with activity limitation are slightly more likely than those without limitation to be uninsured; (3) men with severe disability have more access to Medicare than women, but women have more access to Medicaid; (4) children with activity limitation are as likely as those without limitation to be uninsured (about 15.8 percent); and (5) uninsured adults with disabilities have from 19 percent to 44 percent fewer physician contacts than similar adults with insurance. Extensive tables detail the study's findings. Appendices include standard error information and the questionnaires used in the surveys. (Contains 43 references.) (DB)

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NATIONAL INSTITUTE ON DISABILITY AND REHABILITATION RESEARCH

REPORT 4

Disability Statistics Report

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Disability, Health Insurance Coverage, and Utilization of Acute Health Services in the United States

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DISABILITY, HEALTH INSURANCE COVERAGE, AND UTILIZATION OF ACUTE HEALTH SERVICES IN THE UNITED STATES

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SYMBOLS

--- Data not available
... Category not applicable
* Estimate does not meet standard of reliability or precision (more than 30% relative standard error)
† Estimate is exactly 0 or is greater than 0 and standard error is indeterminate (too few Primary Sampling Units to calculate error)
— Standard error is exactly 0 or is indeterminate (too few Primary Sampling Units to calculate error)

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INTRODUCTION

Health insurance facilitates access to health services and provides some protection against large and unforeseen health care expenses (Office of Health Policy & U.S. Department of Health and Human Services, 1987). However, at least 33 million Americans under age 65 lack health insurance coverage (Short, 1992; Short, Monheit, & Beauregard, 1989; U.S. Bureau of the Census, 1991a) and the rate of uninsurance appears to be rising (Himmelstein, Woolhandler, & Wolfe, 1992; U.S. Bureau of the Census, 1991a; U.S. Bureau of the Census, 1991b; U.S. Bureau of the Census, 1992) especially since 1989. The rate of uninsurance is high among racial and ethnic minorities and people with low incomes. These populations have elevated rates of illness and elevated need for health services (Bunker, Gomby, & Kehrer, 1989), raising the issue of how well the American health care system provides coverage to populations with elevated health needs.

People with disabilities as a group rank highest among populations with elevated need for short- and long-term health services. People with disabilities have significantly higher rates of physician contacts and hospitalization compared to those without disabilities and 3.6 times higher per capita costs of care in 1980 (Rice & LaPlante, 1992). Like other nonelderly Americans, children and adults with disabilities are at risk of being uninsured for health care (Mathematica Policy Research, 1989) and as a result may receive less care than the insured (Davis & Rowland, 1983).

Disability occurs when health impairments (caused by congenital or developmental conditions, chronic illness, or injury) limit human action or activities. The severity of disability can be defined from minor to major by the importance of the actions and activities that are limited and the degree to which they are limited (Verbrugge, 1990). Since disability causes people to withdraw from work, and employment is the gateway to private insurance coverage, many people unable to work depend on public insurance coverage. But public insurance coverage is provided to people with the most "severe" disabilities and people who are poor in certain "needy" categories, such as single parents with children. People with less "severe" disabilities and marginal financial means are at greater risk of being uninsured (Mathematica Policy Research, 1989).

This report uses data from the 1989 National Health Interview Survey—the largest and most recent sample of the U.S. population with detailed disability and health insurance information—to estimate health insurance coverage of children and nonelderly adults with disabilities and their utilization of physician and hospital care as a function of health insurance status. The results are divided in three sections: in part 1, national statistics on disability and insurance status are provided for several different measures and categories of disability. Estimates of the percent of the population with various types of insurance coverage (private, Medicare, Medicaid, military, and other insurance) or with no insurance coverage are provided by sociodemographic and disability status. In part 2, the relationship of insurance to the utilization of health care of people with disabilities is examined. Logistic regression models that simultaneously control for other sociodemographic factors are developed to measure the impact of insurance on utilization of health services. Finally, in Part 3, the relationships of poverty, employment, and disability with private insurance—and whether employment-based or not—public insurance, and uninsurance are examined to help frame certain policy options.

HIGHLIGHTS

- An estimated 35.3 million people under 65 years old were without health insurance in the United States in 1989. Among the uninsured were 4.1 million people limited in activity—547,000 children and 3.5 million adults—making up 11.5% of all uninsured people.
- Adults with activity limitation are slightly more likely than those without limitation to be uninsured (17.8% versus 16.6%).
- Although people who need assistance in self-care (ADL) or routine activities (IADL) have a somewhat lower rate of uninsurance than people without assistance needs, 393,000 of those needing assistance, or 13.1%, remain uninsured.
- About 1.4 million people unable to work at a job or business are uninsured.
- Men with severe disability have more access to Medicare than women, but women have more access to Medicaid, regardless of disability status.
- Close to 45% of older adults out of the labor force and receiving Medicare have private insurance.
- Spousal insurance benefits greatly assist women who have severe disabilities. Of women unable to work who have employer-provided insurance, 76.4% have it in another person's name.
- Unmarried men are more likely than married men or unmarried women to be uninsured. Public insurance covers unmarried men less well than unmarried women, particularly for less severely disabled and non-disabled people.
- Children with activity limitation are as likely as those without limitation to be uninsured (about 15.8%).
- About 547,000 children with limitations in school or play (for those under 5) are uninsured.
- Uninsured adults with disabilities have from 19% to 44% fewer physician contacts and from 29% to 65% fewer hospitalizations than similarly disabled people with insurance, depending on the level of disability.
- Among adults unable to work, those without insurance have 15.2 annual physician visits, 24% lower than the 20.0 annual physician contacts of people unable to work who are insured.

- Among adults unable to work, those without insurance average 31.7 annual hospitalizations per 100 persons, significantly lower than the rate of 52.9 annual hospitalizations of those with insurance.
- Of children with disabilities, the uninsured have 34% fewer physician contacts than the insured, and a lower rate of hospitalization.
- Approximately 691,000 adults who are unable to work are poor and uninsured.
- About a third of children limited in major activity (school or play) are poor, and a quarter of those are uninsured.

BACKGROUND

The uninsured are people who cannot obtain affordable private health insurance plans and are ineligible for or fail to avail themselves of public programs. People with private coverage fall into two main groups: those that have coverage from an employer or spouse's employer and those that buy coverage other than through an employer. Private health insurance is more readily available to people who are employed year-round in full-time jobs with large employers, or who have a spouse who is so employed. Despite the fact that most people obtain insurance through employment, not all employers offer insurance and the majority of the uninsured are actually workers or dependents of workers (Monheit, Hagan, Berk, & Farley, 1985). This fact has led to serious consideration of options to reduce the prevalence of uninsurance by encouraging employers to offer insurance to all employees and their dependents. For people who are not offered private coverage from an employer, having private coverage is highly associated with ability to pay.

The nation's two principal public programs are Medicare and Medicaid. Medicare and Medicaid are designed to overcome the problems of obtaining private insurance that people with severe disabilities and certain poor people experience. Medicare is a federal program providing health care coverage to disabled adults under age 65 who have received cash benefits under the Social Security Disability Insurance (SSDI) program for at least two years. Medicare also covers people receiving cash benefits under the Railroad Retirement System or with end-stage renal disease.

Medicaid is jointly financed by the federal government and the states and provides health insurance coverage to certain individuals and families with limited income and resources. Adults with disabilities who have not worked sufficiently in the past to qualify for SSDI and are poor may receive Supplemental Security Income (SSI) and are covered by Medicaid. Certain children with disabilities may also receive SSI and are covered by Medicaid. In addition, Medicaid covers adults and children enrolled in Aid to Families with Dependent Children (AFDC) and pregnant women and children under age 6 in families with incomes up to 133% of the poverty line. People who incur large medical expenditures but who have income and resources above the Medicaid eligibility level can be covered by optional "medically needy" programs. In 1989, 39 states had medically needy programs. A number of other categories of people are covered by some of the states (Social Security Administration, 1991). People who receive both SSDI and SSI are covered by Medicare and Medicaid. Medicaid may reimburse durable medical equipment purchases and long-term care services for Medicare beneficiaries in some states. State Medicaid programs pay the premiums for Supplemental Medical Insurance under Medicare and deductibles and copayments for dual-eligibles.

Under 1986 legislation, Medicare has been made the secondary payer for services that are covered by private plans through an employer (either the individual's or a family member's) with over 100 employees. This has reduced Medicare payments for services covered by private insurance offered by large employers. Disabled Medicare beneficiaries may retain private coverage when possible since it may pay for services and drugs that Medicare does not pay for. But the role of private insurance is not as well understood for nonelderly Medicare beneficiaries as for elderly beneficiaries.

Private insurance plans and Medicare cover primarily acute health care, i.e., hospitalization and physician services. Medicare also provides home-health services for people requiring skilled nursing services. Medicaid covers these services, but also provides additional long-term services coverage, including long-term institutional services and personal assistance services for people who need help in basic life activities (ADLs and IADLs) in some states.

Medical treatment is freely provided at Department of Defense medical facilities to all military personnel, both active and retired after 20 or more years of service, and their dependents and survivors. CHAMP-US provides reimbursement for private medical services obtained by beneficiaries living outside military hospital catchment areas, minus a deductible and copayment (U.S. Congress & Congressional Budget Office, 1988). The Veterans Administration provides subsidized health care services to veterans discharged from active service because of an illness or injury incurred or aggravated while on duty, to veterans with service-connected disabilities, to former prisoners of war, to veterans exposed to Agent Orange in Vietnam, to veterans aged 65 and older, and to other veterans unable to pay for care. A number of publications provide further details concerning private health insurance, Medicare and Medicaid coverage, and military and Veterans' health care (Health Insurance Association of America, 1991; Social Security Administration, 1991; Systemetrics/McGraw-Hill, 1990; U.S. Congress & Congressional Budget Office, 1988; U.S. General Accounting Office, 1989; U.S. House of Representatives & Committee on Ways and Means, 1992).

DATA AND METHODS

The data used in this study are obtained from public use tapes containing information from the 1989 Health Insurance Supplement to the National Health Interview Survey (NHIS). The 1989 NHIS yielded 116,929 interviews with individuals living in households. In the core questionnaire, respondents were asked about demographic and selected health characteristics, including self-rated health and disability. Non-response to the core questionnaire was 5.1%. Though health insurance questions were intended for all respondents, 3,289 individuals participating in the core did not participate in the supplement. Since sociodemographic and health characteristics are found to be similar between respondents and non-respondents, the data are re-weighted, with non-respondents excluded, to match 1989 noninstitutional population totals for 64 age-sex-race cells (Adams & Benson, 1990). Non-response to the entire survey is handled in the same way. Because of the high enrollment of the elderly in Medicare, the analysis is restricted to people under age 65.

Estimates from the 1989 NHIS are compared with 1984 NHIS estimates to discern any recent trends in health coverage. In 1984 a full sample was conducted and 105,290 people were interviewed. The non-response rate for health insurance questions, which were part of the core questionnaire in 1984, was 3.6%. Other than their position in the survey, there were no major changes in the insurance questions from 1984 to 1989. Thus, the re-weighted 1989 estimates should be comparable with those from 1984. However, small differences that may be statistically significant could be due to differences in non-response that could not be fully accounted for by re-weighting, for example, if respondents in the two years differ on any unmeasured variables.

The NHIS is a highly stratified multi-stage complex sample that requires special methods for calculating the errors of estimates (Wolter, 1985). Standard errors of estimates are calculated using RTIFREQS, SESUDAAN, RATIOEST, and RTILOGIT software provided by the Research Triangle Institute. The Taylor series linearization method is used with a design incorporating stratum and PSU variables. Standard errors for estimates of proportions (e.g., percent with insurance), means (e.g., average number of physician visits), and ratios (e.g., average length of hospital stay per discharge) are shown in Appendix tables. These errors are found to be more reliable overall than error formulas provided by NCHS (smaller average design effects), particularly for means and ratios (LaPlante, 1991a). Errors for logistic regression estimates are calculated using RTILOGIT.

About 16.4% of sample individuals had missing data on family income. In these cases, values are imputed using polytomous logistic regression prediction models, which are estimated separately for families and individuals as a function of age, education, race, and occupation of individuals or family heads.[1] Poverty estimates are consistent with those from the Current Population Survey (CPS) at the 95% confidence level. About 18.5% (±0.6%) of children and 9.7% (±0.3%) of adults aged 18 to 64 are estimated to be poor, slightly lower than the estimates of 19.6% (±0.6%) and 10.2% (±0.2%) from the CPS (U.S. Bureau of the Census, 1991a). Family income is the only variable imputed in the NHIS sample.

The annual number of physician contacts (including telephone contacts) is estimated in the NHIS using the number of contacts that occur in the two-week period prior to the interview and multiplying by 26. This procedure reduces bias due to forgetting and is allowable because the survey is conducted continuously over the entire year. Similarly, hospital discharges reported for the 6-month period prior to the interview are multiplied by 2 to yield an annual estimate. Average length of stay is computed for completed hospitalizations (hence discharges and not episodes are used) for a particular population group as the ratio of total hospital days to the number of discharges for the group (for discharges in the past 6 months).

A difference statistically significant at the $p<0.05$ level of probability or better is the criterion used in this study. A stricter level of probability might result in important differences being rejected as insignificant for low-prevalence disability groups.

DEFINITIONS

Disability is defined operationally as a limitation in activity due to chronic mental, physical, or emotional health problems. Disabilities are categorized according to severity. For children under 5 years old, categories include being unable to take part in ordinary play activities, limitation in the kind or amount of play, or limitations in other activity (e.g., can't go out in the cold). For children aged 5 to 17 years, categories include inability to perform self-care activities (ADLs) without assistance from others, inability to attend school, limitation in the amount or kind of school work (i.e., attending special classes or being limited in school attendance), and limitation in activities outside of school (e.g., sports). Disability categories for adults include inability to perform self-care activities (ADLs) and routine activities (IADLs) without assistance from others, inability to work at a job or business or to do housework, limitation in the amount or kind of work or housework, and limitation in activities other than work or housework (e.g., recreation and civic activities).

A person is defined to have health insurance if the individual was covered by a private health insurance plan, Medicare, Medicaid, or military coverage, as determined by answers to the questions reproduced in the Appendix to this report. In 1989, people were first

[1] These results are available from the author by request.

asked about Medicare coverage (Section M, Q. 1b). Interviewers then asked about specific health insurance plans covering hospital, doctor, or dental bills (Q. 4-8). Interviewers were trained to consider only privately financed health plans (National Center for Health Statistics, 1990). People not covered by Medicare or a private plan were then asked to choose the main reason they did not have such coverage (Q. 9b) from a list of 7 specific reasons (Card M). The 3,344 respondents of all ages who listed "some other plan" as a reason are considered insured. Subsequent questions ascertained coverage by Medicaid and military insurance. All people receiving AFDC (Q. 10) or SSI (Q. 11),[2] or possessing a Medicaid card (Q. 13), are considered covered by Medicaid. A small number of people (about 520,000 weighted estimate) indicated that they were covered by other public assistance programs (Q. 14) but did not have Medicare or a private plan, were not on AFDC or SSI and did not have a Medicaid card, did not have military coverage, and did not say they had a plan in response to Q. 9b. It is not clear what this means—being "covered" by a public assistance program may mean that a person goes to a clinic for a limited array of free services, which is not an organized health plan—so these people were not considered insured.

The NHIS does not include active military personnel, but it does include dependents not living on military bases. The NHIS categorizes people as having military insurance if they receive military retirement or VA pensions or both (Q. 16c), are dependents of active or retired military personnel covered by CHAMP-US (Q. 17b), are dependents or survivors of disabled veterans covered by CHAMP-VA (Q. 17d), or benefit from any other program providing health care for military dependents or survivors (Q. 18b).

A residual category is made up of people who stated on question 9b that they had a plan, but on subsequent questions were not identified as having Medicaid or military insurance. These plans may include such coverage as the Indian Health Service, state or local programs, self-insurance, or philanthropies, and are categorized as undefined. Individuals having none of the types of plans enumerated are considered uninsured. Medicare, Medicaid, and military coverage are further combined into the category *public coverage*.

ACCURACY OF THE ESTIMATES

In 1989, 35.3 million people in the United States under 65 years old—16.5% of the population—were without health insurance (Table A). This estimate of the uninsured lies midrange between the lowest and highest independent estimates of the uninsured.[3] Using the same survey data, Ries (1991) obtains a lower estimate of 33.6 million uninsured (15.7%). This discrepancy can be explained by differences in the way non-response is handled by Ries compared to the present analysis. Both unit non-response (the respondent fails to answer the entire questionnaire) and item non-response (the respondent fails to answer a specific question) are treated differently by Ries.

In Ries's report, unit non-response was not treated systematically across types of plans due to an editing error in the data that was discovered in the course of conducting this study (LaPlante, 1991b; Parsons, 1991). For private insurance and Medicare estimates, Ries handled unit non-response in the usual way, by reweighting the survey respondents (see Data and Methods). But for public assistance (predominantly Medicaid) and military coverage, records were edited incorrectly to indicate that the respondent did not have these types of coverage, when unit non-response had in fact occurred. This editing problem has a small effect on Ries's estimate of the percent with public assistance coverage, changing from 6.2% to a corrected estimate of 6.4% (Parsons, 1991). The percent with military coverage is unaffected by the unit non-response correction.

Item non-response arises when someone is unsure of his or her coverage for a particular type of insurance plan. This accounts for most of the difference between the estimates shown in Table A. The difference of 0.5% in estimates of private insurance coverage is entirely due to item non-response. Ries excluded people who did not know whether they were covered by a private insurance plan—they are assumed in this study not to be covered by a private plan. The estimate for Medicaid coverage is higher in this study because all persons claiming to have a Medicaid card were considered covered by Medicaid, whereas Ries included only those with a currently valid card. The latter rule omits people who were covered but could not produce their card—definitely a problem for people away from home at the time of the interview but for whom proxy respondents indicated they were

[2] All states are required to provide Medicaid coverage to AFDC recipients. In most states, SSI recipiency confers Medicaid entitlement. Twelve states use more restrictive eligibility rules than those used in the federal SSI program. However, such states are required to allow applicants to deduct medical expenses from countable income, referred to as section 209(b) spend-down. Numerous exceptions require extending Medicaid to a variety of people with disabilities under special circumstances (Ruther, Reilly, Silverman, & Abbott, 1990). Because these criteria are complicated and vary from state to state, they are not measured in the NHIS. Therefore, the practice is to include all persons on SSI as being eligible for Medicaid (Ries, 1991) which may result in some individuals residing in the states that use more restrictive criteria being defined as having Medicaid when they actually do not. This error is most likely negligible.

[3] In 1989, approximately 31 million people were uninsured during any quarter of the year based on data from the Survey of Income and Program Participation (Short, 1992). It is estimated that about 37 million people were uninsured during the first quarter of 1987 from the National Medical Expenditure Survey (Short et al., 1989). These surveys yield different estimates because of differences in questioning, reference periods, and sampling.

TABLE A. Comparison of Four Study Estimates of the Percent of the Population Under Age 65 with Health Insurance by Type of Insurance Coverage: United States, 1987, 1989, and 1990

Study:	Private (%)	Medicare (%)	Medicaid (%)	Military (%)	Not insured (%)
Ries: 1989 NHIS	75.9	1.4	6.2[a]	2.4	15.7
LaPlante: 1989 NHIS	75.4	1.4	6.6	2.4	16.5
Short, K: 1990 SIPP	75.9	1.5	8.2	2.6	14.6
Short, P: 1987 NMES	75.4		7.2[b]		17.4

Sources: Short, K. (1992, May). Health Insurance Coverage: 1987-1990 (Selected data from the Survey of Income and Program Participation). Current Population Reports, Series P-70 (29). Washington, D.C.: U.S. Bureau of the Census. Ries, P. (1991). Characteristics of Persons With and Without Health Care Coverage: United States, 1989. Advance Data from Vital and Health Statistics (201). Hyattsville, Maryland: National Center for Health Statistics. Short, P. F., Monheit, A. C., & Beauregard, K. (1989). A Profile of Uninsured Americans. National Medical Expenditure Survey Research Findings 1 (DHHS Pub. No. PHS 89-3443). Rockville, Maryland: Public Health Service, Agency for Health Care Policy and Research.

[a] Includes a small number of people with other public assistance coverage.

[b] Percent with public coverage only.

covered by Medicaid. The proportion uninsured is lower in Ries's study because unit and item non-responses were excluded (weighted number approximately 9.7 million persons: 6.9 million unit non-response and 2.8 million item non-response). In this study, unit non-response is excluded but item non-response is considered uninsured.[4] Thus, the rate of uninsurance is 16.5% of the population under age 65.

Estimates of the fraction of the population with private insurance are statistically identical from the NHIS, SIPP, and NMES. More variation occurs for Medicaid estimates. Estimates of Medicare and Medicaid coverage can be compared with administrative statistics. From the NHIS, the estimated number of people on Medicare in 1989 is 141,000 (±52,000) children and 2,823,000 (±150,000) adults (see Results section, Table C), for a total of 2,964,000 (±192,000) people. The confidence interval on this estimate overlaps the Health Care Financing Administration figure of 3,171,000 people under age 65 enrolled in Medicare under Part A hospital insurance (Social Security Administration, 1990, Table 7.B5) on July 1, 1989. Thus, the NHIS estimates Medicare coverage quite precisely and agrees with the SIPP estimate.

NHIS estimates of people on Medicaid are 7,562,000 (±696,000) children and 6,635,000 (±478,000) adults, for a total of 14,197,000 (±1,122,000) nonelderly people. This is lower than the HCFA figure of 20,379,000 people under age 65 who used Medicaid during 1989 (Social Security Administration, 1990, Table 7.E2) of whom 10.3 million were under age 21. The HCFA figure is a count for the whole year, and it should be higher than the number of people covered at a point in time as in the NHIS. Respondents were also asked in the NHIS if they had used Medicaid in the past year. Approximately 12.5 million nonelderly said they had, but this estimate is much less than the 20.4 million recipients reported by the Medicaid program to have used services in the past year. So even by this method of estimating, a substantial gap in the estimates between the NHIS and the Medicaid program remains. Medicaid use is highly dynamic and people may not remember services used earlier in the year. Thus, it is difficult to reconcile NHIS estimates of people covered by Medicaid with independent program statistics.

From the 1990 Survey of Income and Program Participation (SIPP), 8.2% of nonelderly people (17.9 million ±1.1 million) are estimated to be covered by Medicaid (Short, 1992), 1.6 percentage points above the NHIS estimate (Table A). The higher proportion covered by Medicaid accounts for the lower estimate of the uninsured from the SIPP than the NHIS (14.6% ±0.6% versus 16.5% ±0.4%) since the SIPP and NHIS estimates for private insurance, Medicare, and military coverage are comparable. Thus, there is some evidence that the NHIS estimate of the Medicaid-covered population is low, and the estimate of the percent of the population uninsured is somewhat higher.

From the NHIS, approximately 5.2 million people (±1.4 million) are estimated to have military coverage. This compares with 5.3 million military beneficiaries, including dependents of active personnel and retirees and their dependents, an estimate from the Congressional Budget Office estimate for 1986 based on Department of Defense administrative data (U.S. Congress & Congressional Budget Office, 1988). Many dependents of active military personnel may be living on base, so the CBO estimate is not directly comparable to the NHIS. But the NHIS also includes some people eligible for VA who may not be eligible for military benefits. Since there is agreement between NHIS and

[4] To be exact, Ries estimate of the uninsured is 33.7 million. The proportion is calculated thus: 33.7 million/(214.3 million - 9.7 million (unit and item nonresponse))=15.7%. Here the uninsured is 35.2 million, which equals Ries' estimate of 33.7 million plus 1.6 million excluded by Ries as item nonresponse.

SIPP estimates of military coverage (which includes CHAMP-US, CHAMP-VA, or other military coverage), it seems that the enumeration of this population is reasonable.

RESULTS

1 HEALTH INSURANCE COVERAGE, SOCIODEMOGRAPHIC CHARACTERISTICS, AND DISABILITY

Our purpose here is to describe how insurance coverage varies by socio-demographic characteristics including age, race, Hispanic origin, educational attainment, labor force status, and poverty to serve as a context for examining the relationship of disability to insurance coverage.

1.1 Adults

In Table B, estimates of the health insurance coverage of the adult population aged 18 to 64 years are shown by type of insurance (private only, public only, public and private, plans not defined as public or private, and uninsured) and sociodemographic characteristics. Estimates of the percent of the population covered by Medicare or by Medicaid are also included. The category *public* includes Medicare, Medicaid, and military insurance. Estimates for more detailed categories of insurance coverage are shown in Table 1. In both tables, all insurance categories labeled "only" and the uninsured are mutually exclusive and exhaustive and thus, except for rounding error, sum to 100%.[5]

Sociodemographics

In 1989, the nonelderly adult population comprised 150.3 million people, 74.7% of whom were covered by private insurance only, 5.7% by public insurance only (Medicare, Medicaid, or military), 2.5% by private and public, and 0.4% by undefined plans, leaving 16.7% of the nonelderly adult population uninsured—some 25.2 million nonelderly adults.

Medicare covered 1.9% of the nonelderly adult population, Medicaid 4.4%, and military 2.5%. In all, 8.2% received insurance from the federal government. Notably, about a third of the publicly insured have private insurance. About 50% of people with military coverage have private insurance, as do 42% of those with Medicare, and 9% of those with Medicaid. People with public coverage may have private insurance to pay for deductible and co-insurance amounts charged for covered services (except under Medicaid) and to pay for non-covered services.

The percent of the population with private coverage rises with age. Medicare coverage and military coverage are higher among people aged 45 to 64 years, but Medicaid coverage declines with age. Still, the net result is that the percent uninsured decreases with age. About 28.3% of people 18-24 years old are uninsured, which is about 2.5 times as high as for people aged 45 to 64 (t=25.64, p<.001).

Black people are more likely to have only public insurance coverage than are white people (13.9% versus 4.5%, t=17.64, p<.001) or people of other races (13.9% versus 8.0%, t=6.35, p<.001). Blacks also have a lower rate of private insurance coverage than whites (58.2% versus 77.3%, t=21.4, p<.001) and a higher rate of uninsurance (24.3% versus 15.5%, t=13.12, p<.001). People of other races are also more likely than white people to be uninsured (22.7% versus 15.5%, t=4.71, p<.001), but are not significantly different from black people.

The proportion with private coverage is very high among college graduates (91.8%) and declines substantially with lower levels of educational attainment. This high proportion reflects the comprehensive benefits that accompany higher status jobs as well as the ability of highly educated people to pay for private insurance if they do not receive health insurance through employment. Medicare and Medicaid coverage both increase with lower levels of educational attainment, but military coverage is highest for high school graduates and those with some college. Low educational attainment is associated with poverty, as reflected by the higher proportion of people with Medicaid coverage. Medicare coverage is also higher for those with low education. Though public coverage appears to compensate for the decline in private coverage for those with lower educational attainment, it does not do so fully, and the rate of uninsurance increases as educational attainment declines.

For all age groups, higher education is strongly positively associated with private insurance and negatively associated with public coverage (particularly Medicaid) and with being uninsured. About 42.8% of adults aged 18 to 24 who have not graduated from high school are uninsured. Among people aged 45 to 64, Medicare coverage increases with lower educational attainment, consistent with the profile of Social Security Disability Insurance beneficiaries as predominantly older workers with low educational attainment (Social Security Administration, 1987). Despite this, 20.8% of people aged 45 to 64 who have not completed high school are uninsured, compared to less than 9% of those with higher education. Unlike poverty and disability, with which it is associated, low educational attainment does not confer eligibility for public insurance.

Married people are much more likely than unmarried people to have private insurance (e.g., 83.6% married versus 51.7% separated, t=21.91, p<.001) and less likely to be uninsured (e.g., 12.6% married versus 19.7% widowed, t=5.74, p<.001). Although 20.5% of separated people

[5] In Table 1, the categories flagged as excluding military coverage add together with the categories any military coverage and uninsured to total 100.0% (except for rounding error).

TABLE B. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only %	Public Only %	Private and Public %	Undefined Plans Only %	Not Insured %	Medicare %	Medicaid %
Total	150,309	68,211	74.7	5.7	2.5	0.4	16.7	1.9	4.4
Age									
18-24 years	25,401	11,013	62.7	7.1	1.1	0.7	28.3	0.4	6.1
25-44 years	78,794	35,589	77.2	4.9	1.4	0.0	16.3	0.9	4.2
45-64 years	46,114	21,609	77.0	6.3	5.2	0.4	11.1	4.3	3.9
Race									
White	127,549	56,501	77.3	4.5	2.5	0.3	15.5	1.8	3.3
Black	17,477	9,480	58.2	13.9	2.6	1.0	24.3	3.0	12.1
Other	5,283	2,230	65.5	8.0	2.5	1.4 *	22.7	0.7	6.6
Ethnicity									
Hispanic	12,118	5,326	52.2	9.9	1.7	0.7	35.5	1.8	8.8
Non-Hispanic	138,191	62,885	76.7	5.3	2.6	0.4	15.1	1.9	4.0
Education									
Less than 12 years	27,181	12,676	50.7	14.6	3.3	0.5	30.8	5.0	12.8
12 years	59,345	27,021	74.6	5.1	2.5	0.5	17.3	1.5	3.9
Some college	32,511	14,535	81.3	3.2	2.3	0.4	12.9	0.8	1.9
College graduate	30,583	13,649	89.9	1.3	1.9	0.2	6.8	0.8	0.4
Unknown	689	330	43.9	16.1	5.9	0.3 *	33.8	9.6	16.7
Age & Education									
18-24 years &									
Less than 12 years	5,333	2,378	40.6	14.6	1.3	0.8	42.8	0.9	14.1
12 years	10,897	4,746	60.3	7.1	1.1	0.9	30.6	0.3	5.9
Some college	7,269	3,092	77.6	3.2	0.9	0.6	17.8	0.2 *	1.7
College graduate	1,819	757	84.1	0.7 *	1.1 *	0.3 *	13.8	0.4 *	0.1 *
Unknown	83	40	38.0	12.0 *	15.7 *	0.0 †	34.3	10.1 *	25.3
25-44 years &									
Less than 12 years	10,307	4,723	47.0	15.2	1.7	0.3	35.8	2.7	14.7
12 years	30,151	13,755	75.7	4.9	1.5	0.4	17.7	0.8	4.2
Some college	17,961	8,058	82.3	3.0	1.4	0.3	12.9	0.5	2.0
College graduate	20,032	8,892	90.9	1.0	0.9	0.2	7.0	0.4	0.4
Unknown	344	161	41.8	16.2	6.9 *	0.5 *	34.5	8.7	19.6
45-64 years									
Less than 12 years	11,542	5,575	58.8	14.1	5.6	0.6	20.8	9.0	10.6
12 years	18,296	8,520	81.2	4.3	5.1	0.4	8.9	3.3	2.1
Some college	7,281	3,385	82.2	3.6	5.8	0.4 *	8.0	2.2	1.6
College graduate	8,733	4,000	88.8	2.0	4.3	0.1 *	4.8	1.8	0.5
Unknown	263	129	48.4	17.3	1.5 *	0.0 †	32.8	10.7 *	10.2 *
Marital Status									
Married	98,752	44,703	80.9	3.5	2.7	0.3	12.6	1.5	2.0
Widowed	3,310	1,607	61.1	13.4	5.3	0.4 *	19.7	7.5	8.9
Divorced	11,511	5,366	63.8	11.2	2.4	0.7	21.9	3.1	9.5
Separated	3,599	1,766	49.1	21.6	2.6	0.7	26.0	2.9	20.5
Never married	32,937	14,675	64.0	7.8	1.7	0.6	25.9	1.9	7.5
Unknown	199	94	61.8	5.8 *	5.0 *	0.0 †	27.3	3.9 *	6.6 *
Employment Status									
Currently employed	113,327	50,944	81.3	1.7	1.7	0.3	15.1	0.3	1.0
Unemployed	4,641	2,139	45.7	12.1	1.7	0.5	39.9	0.6	10.7
Not in labor force	32,341	15,128	55.6	18.8	5.5	0.8	19.3	7.4	15.4
Employment Status & Age									
Currently employed &									
18-24 years	17,646	7,537	68.5	2.6	0.7	0.6	27.5	0.2 *	1.5
25-44 years	64,285	28,774	82.9	1.5	1.2	0.2	14.3	0.3	1.1
45-64 years	31,396	14,633	85.3	1.5	3.3	0.3	9.6	0.6	0.5

TABLE B. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance				Not Insured %	Medicare %	Medicaid %
			Private Only %	Public Only %	Private and Public %	Undefined Plans Only %			
Unemployed &									
18-24 years	1,384	617	40.5	12.3	1.3 *	0.8 *	45.1	0.6 *	11.8
25-44 years	2,400	1,109	43.3	13.6	1.3	0.4 *	41.4	0.4 *	12.2
45-64 years	858	413	60.8	7.9	3.6	0.4 *	27.3	1.2 *	4.9
Not in labor force &									
18-24 years	6,371	2,859	51.5	18.4	2.2	1.1	26.8	1.0	17.4
25-44 years	12,109	5,706	53.6	21.2	2.5	0.7	22.0	4.4	19.0
45-64 years	13,860	6,563	59.3	16.9	9.6	0.7	13.5	13.0	11.5
Family Income									
Under $5,000	5,743	2,668	33.8	28.2	2.2	0.9	34.9	4.1	27.3
$5,000-$6,999	3,689	1,717	27.0	31.0	2.6	1.3	38.1	7.0	27.6
$7,000-$9,999	5,095	2,504	28.3	27.1	2.9	0.7	41.0	6.2	24.3
$10,000-$14,999	12,298	5,743	45.9	11.8	2.8	0.9	38.5	4.3	9.4
$15,000-$19,999	16,317	7,508	62.5	6.2	2.7	0.6	28.0	3.0	4.5
$20,000-$24,999	11,907	5,395	75.8	4.2	2.6	0.4	17.0	1.7	2.4
$25,000-$34,999	30,144	12,504	82.4	2.2	2.7	0.4	12.3	1.4	1.1
$35,000-$49,999	33,464	15,053	87.4	1.4	2.3	0.1	8.8	0.6	0.6
$50,000 or more	31,653	14,119	91.4	0.9	2.3	0.2	5.3	0.5	0.3
Poverty Level									
Under 0.50	5,112	2,397	27.3	31.7	2.2	1.0	37.9	2.1	31.3
0.50 to under 1.00	9,543	4,562	29.4	27.6	2.0	1.0	40.1	5.5	25.4
1.00 to under 1.25	6,063	2,877	43.4	13.0	2.2	0.6	40.8	4.1	10.9
1.25 to under 1.50	6,945	3,276	53.5	10.5	2.0	0.7	33.2	3.8	7.6
1.50 to under 1.75	10,712	4,973	67.6	5.5	2.7	0.4	23.8	2.4	3.9
1.75 to under 2.00	17,583	8,001	77.7	3.2	2.0	0.5	16.6	1.7	1.9
2.00 and above	94,352	42,125	85.6	1.7	2.7	0.3	9.7	1.2	0.7
Age and Poverty Level									
18-24 years &									
Under 0.50	2,118	937	46.3	19.6	1.4 *	1.3 *	31.5	0.3 *	18.9
0.50 to under 1.00	2,780	1,248	39.0	18.2	0.9 *	1.4	40.5	0.7 *	17.0
1.00 to under 1.25	1,528	693	38.5	12.6	0.7 *	0.0 †	48.2	0.4 *	11.1
1.25 to under 1.50	1,506	683	49.0	10.0	1.1 *	0.9 *	39.1	0.7 *	8.7
1.50 to under 1.75	2,079	926	52.5	6.9	1.7	0.6 *	38.4	1.0 *	5.1
1.75 to under 2.00	3,452	1,506	68.1	3.9	0.9 *	0.9 *	26.2	0.4 *	2.6
2.00 and above	11,938	5,020	76.2	2.2	1.2	0.5	19.8	0.3 *	1.4
25-44 years &									
Under 0.50	2,235	1,070	12.6	41.9	2.4	0.6 *	42.5	1.7 *	43.1
0.50 to under 1.00	4,474	2,156	26.7	27.4	1.9	0.7	43.3	3.5	26.8
1.00 to under 1.25	3,167	1,489	47.2	11.2	1.6	0.6 *	39.3	2.8	10.1
1.25 to under 1.50	3,638	1,689	56.9	7.0	1.4	0.4 *	34.3	1.6	6.0
1.50 to under 1.75	6,530	3,022	74.2	4.1	1.6	0.4 *	19.7	1.1	2.9
1.75 to under 2.00	10,255	4,648	81.9	2.2	1.2	0.4	14.2	0.7	1.4
2.00 and above	48,496	21,515	87.7	1.2	1.2	0.2	9.7	0.5	0.5
45-64 years &									
Under 0.50	759	390	17.5	35.4	3.8	1.1 *	42.3	8.5	31.5
0.50 to under 1.00	2,290	1,158	22.9	39.4	3.3	1.0 *	33.3	15.5	33.0
1.00 to under 1.25	1,367	695	40.0	17.5	5.2	1.2 *	36.0	11.3	12.5
1.25 to under 1.50	1,801	904	50.5	18.0	4.2	1.2 *	26.1	10.8	10.0
1.50 to under 1.75	2,103	1,025	62.2	8.3	6.8	0.5 *	22.2	7.8	5.7
1.75 to under 2.00	3,875	1,847	75.0	5.0	5.1	0.6 *	14.3	5.4	2.6
2.00 and above	33,919	15,590	86.1	2.3	5.3	0.3	6.1	2.5	0.7

TABLE B. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only %	Public Only %	Private and Public %	Undefined Plans Only %	Not Insured %	Medicare %	Medicaid %
All Men	73,112	32,250	74.7	3.8	2.8	0.4	18.3	2.1	2.3
Age									
18-24 years	12,396	5,267	63.6	2.9	0.9	0.5	32.1	0.5	2.4
25-44 years	38,647	16,780	77.1	2.8	1.4	0.4	18.4	1.0	2.0
45-64 years	22,069	10,203	76.7	6.0	6.4	0.5	10.4	4.9	2.8
Race									
White	62,664	27,278	76.9	3.1	2.9	0.3	16.9	2.0	1.8
Black	7,900	3,928	60.0	8.4	2.6	1.2	27.8	3.5	5.7
Other	2,549	1,044	66.6	5.8	2.0	1.4 *	24.2	0.8 *	4.8
Ethnicity									
Hispanic	5,844	2,513	52.0	5.1	1.8	1.0	40.1	1.8	4.3
Non-Hispanic	67,269	29,737	76.6	3.7	2.9	0.4	16.4	2.1	2.2
Education									
Less than 12 years	13,576	6,139	52.7	9.9	3.5	0.6	33.4	5.7	7.4
12 years	27,052	11,962	73.8	3.2	2.7	0.5	19.8	1.7	1.9
Some college	15,275	6,633	80.7	2.1	2.8	0.5	13.9	0.7	0.7
College graduate	16,786	7,321	89.2	1.1	2.4	0.1 *	7.2	1.0	0.3
Unknown	424	195	41.8	13.5	3.9 *	0.4 *	40.3	7.8 *	12.5
Age & Education									
18-24 years &									
Less than 12 years	2,891	1,262	43.9	6.0	1.2	0.7 *	48.2	1.1 *	5.6
12 years	5,268	2,242	61.2	2.7	0.8	0.6	34.7	0.4 *	2.2
Some college	3,342	1,391	79.6	1.2 *	0.6 *	0.4 *	18.2	0.1 *	0.4 *
College graduate	843	347	83.8	0.0	0.5 *	0.3 *	15.3	0.5 *	0.0
Unknown	52	25	28.7	12.8 *	13.1 *	0.0 †	45.4	7.7 *	22.0 *
25-44 years &									
Less than 12 years	5,187	2,271	48.7	9.1	1.3	0.3 *	40.4	3.2	8.1
12 years	14,079	6,164	75.2	2.5	1.4	0.5	20.4	0.9	1.8
Some college	8,555	3,681	81.9	1.6	1.8	0.6	14.2	0.4 *	0.8
College graduate	10,630	4,575	90.3	0.7	1.0	0.1 *	7.8	0.6	0.3
Unknown	197	89	37.9	12.5	3.0 *	1.0 *	45.7	7.5 *	13.2
45-64 years									
Less than 12 years	5,498	2,606	61.0	12.5	6.7	0.8	19.0	10.6	7.7
12 years	7,704	3,556	79.8	4.7	6.5	0.6	8.4	3.9	1.8
Some college	3,378	1,561	79.0	4.2	7.7	0.5 *	8.7	2.1	0.7
College graduate	5,313	2,399	88.0	1.9	5.4	0.2 *	4.5	2.0	0.4 *
Unknown	175	81	50.1	14.8 *	2.3 *	0.0 †	32.8	8.2 *	9.0 *
Marital Status									
Married	48,774	21,630	80.6	2.8	3.3	0.3	13.0	1.9	1.6
Widowed	515	249	61.6	13.1	5.8	0.6 *	19.0	7.3	8.1
Divorced	4,481	1,969	61.8	8.1	3.5	1.2	25.4	3.9	3.6
Separated	1,199	555	55.5	9.6	2.0	0.7 *	32.2	2.4	6.3
Never married	18,039	7,798	63.5	4.5	1.3	0.7	30.0	2.0	3.7
Unknown	105	49	66.4	4.0 *	6.4 *	0.0 †	23.2	4.3 *	2.3 *
Employment Status									
Currently employed	62,141	27,259	80.0	1.1	1.9	0.3	16.6	0.3	0.6
Unemployed	2,370	1,049	39.5	8.4	1.5	0.5 *	50.1	0.6 *	6.7
Not in labor force	8,601	3,942	45.7	21.5	9.6	1.4	21.8	15.3	14.1
Employment Status & Age									
Currently employed &									
18-24 years	9,216	3,875	65.9	1.4	0.6	0.5	31.6	0.2 *	0.9
25-44 years	35,503	15,357	81.4	0.9	1.2	0.3	16.2	0.3	0.6
45-64 years	17,422	8,027	84.7	1.5	4.1	0.3	9.4	0.5	0.3

TABLE B. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance				Not Insured %	Medicare %	Medicaid %
			Private Only %	Public Only %	Private and Public %	Undefined Plans Only %			
Unemployed &									
18-24 years	718	313	39.0	4.6	0.9 *	0.2 *	55.3	0.9 *	4.6
25-44 years	1,199	527	32.1	10.7	1.1 *	0.6 *	55.4	0.4 *	8.6
45-64 years	453	209	59.9	8.1	3.4 *	0.7 *	27.9	0.5 *	4.8 *
Not in labor force &									
18-24 years	2,463	1,079	61.8	8.2	1.9	0.8 *	27.4	1.4	7.8
25-44 years	1,945	896	26.4	32.0	4.4	2.3	34.9	15.1	24.0
45-64 years	4,193	1,967	45.2	24.3	16.6	1.4	12.4	23.6	13.2
Family Income									
Under $5,000	2,208	968	36.6	17.1	0.9 *	0.8 *	44.6	3.9	15.0
$5,000-$6,999	1,477	664	28.6	21.3	1.3 *	2.2 *	46.5	6.7	15.5
$7,000-$9,999	1,989	942	26.0	20.6	3.0	0.9 *	49.6	9.0	14.8
$10,000-$14,999	5,396	2,438	42.2	9.9	2.7	1.2	44.0	5.8	6.5
$15,000-$19,999	7,558	3,343	58.7	5.1	3.1	0.6 *	32.5	3.7	2.8
$20,000-$24,999	5,730	2,528	74.5	2.7	3.0	0.4 *	19.4	2.2	1.4
$25,000-$34,999	15,186	6,624	80.9	1.8	3.2	0.4	13.7	1.6	0.8
$35,000-$49,999	17,187	7,575	86.1	1.0	2.8	0.2 *	9.9	0.7	0.3
$50,000 or more	16,382	7,168	90.3	0.8	2.7	0.2 *	6.1	0.6	0.2
Poverty Level									
Under 0.50	1,880	822	30.6	17.5	0.9 *	1.3 *	49.7	2.3 *	15.6
0.50 to under 1.00	3,883	1,782	30.3	19.8	1.3	1.3	47.3	6.3	16.2
1.00 to under 1.25	2,733	1,252	42.3	8.6	2.3	0.7 *	46.0	5.3	6.3
1.25 to under 1.50	3,188	1,445	52.1	8.4	1.9	0.6 *	37.1	5.0	4.4
1.50 to under 1.75	5,254	2,377	66.2	4.5	2.8	0.6 *	25.9	3.0	2.4
1.75 to under 2.00	8,612	3,830	76.9	2.3	2.2	0.5	18.2	1.7	1.1
2.00 and above	47,563	20,742	84.0	1.5	3.2	0.3	11.0	1.3	0.5
Age and Poverty Level									
18-24 years &									
Under 0.50	828	347	47.5	9.4	0.5 *	1.5 *	41.1	0.3 *	8.8
0.50 to under 1.00	1,216	536	41.7	7.7	1.1 *	1.5 *	48.1	0.9 *	7.2
1.00 to under 1.25	707	319	38.5	2.9 *	0.3 *	0.0 †	58.4	0.3 *	2.6 *
1.25 to under 1.50	707	305	49.3	3.1 *	0.7 *	0.4 *	46.4	1.1 *	3.3 *
1.50 to under 1.75	1,061	466	52.4	4.6	1.4 *	0.2 *	41.3	1.8 *	2.7
1.75 to under 2.00	1,726	750	66.7	2.2	0.3 *	0.7 *	30.1	0.3 *	1.4 *
2.00 and above	6,152	2,544	75.6	1.1	1.0	0.3 *	22.1	0.3 *	0.8
25-44 years &									
Under 0.50	741	326	16.4	20.4	0.5 *	0.6 *	62.0	0.7 *	19.7
0.50 to under 1.00	1,809	818	28.1	17.6	1.2 *	0.9 *	52.1	4.0	16.0
1.00 to under 1.25	1,477	660	46.0	7.1	1.5 *	1.0 *	44.3	3.8	5.8
1.25 to under 1.50	1,720	770	55.2	5.0	1.0 *	0.4 *	38.4	1.9	3.6
1.50 to under 1.75	3,197	1,432	72.5	2.7	1.8	0.7 *	22.3	1.4	1.6
1.75 to under 2.00	4,983	2,178	80.8	1.5	1.3	0.4 *	16.1	0.7	0.9
2.00 and above	24,721	10,596	85.7	1.0	1.4	0.3	11.7	0.6	0.5
45-64 years &									
Under 0.50	311	149	19.3	32.2	2.9 *	2.3 *	43.3	11.6 *	23.8
0.50 to under 1.00	858	428	18.5	41.6	1.9 *	1.7 *	36.3	19.0	29.5
1.00 to under 1.25	550	273	37.4	20.1	7.1	0.9 *	34.5	15.8	12.5
1.25 to under 1.50	761	370	47.7	20.7	4.9	1.2 *	25.4	15.5	7.3
1.50 to under 1.75	996	479	60.5	10.1	7.6	0.8 *	21.0	9.4	4.5
1.75 to under 2.00	1,903	902	75.9	4.4	6.1	0.8 *	12.8	5.7	1.6
2.00 and above	16,689	7,602	84.5	2.5	6.7	0.3	6.0	2.8	0.6

TABLE B. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only %	Public Only %	Private and Public %	Undefined Plans Only %	Not Insured %	Medicare %	Medicaid %
All Women	77,197	35,961	74.7	7.5	2.2	0.4	15.3	1.7	6.4
Age									
18-24 years	13,005	5,746	61.9	11.1	1.4	1.0	24.6	0.4	9.5
25-44 years	40,147	18,809	77.2	6.9	1.3	0.2	14.3	0.8	6.2
45-64 years	24,046	11,406	77.3	6.5	4.0	0.3	11.8	3.8	4.9
Race									
White	64,885	29,223	77.8	5.8	2.1	0.3	14.1	1.6	4.7
Black	9,578	5,552	56.7	18.4	2.6	0.8	21.5	2.7	17.4
Other	2,734	1,186	64.4	10.0	3.0	1.4 *	21.3	0.6 *	8.3
Ethnicity									
Hispanic	6,274	2,813	52.3	14.3	1.7	0.5	31.2	1.9	13.1
Non-Hispanic	70,923	33,148	76.7	6.9	2.2	0.4	13.9	1.6	5.8
Education									
Less than 12 years	13,605	6,537	48.8	19.4	3.1	0.5	28.3	4.3	18.3
12 years	32,293	15,059	75.2	6.7	2.4	0.5	15.3	1.4	5.6
Some college	17,236	7,902	81.7	4.2	1.8	0.3	12.0	0.9	2.9
College graduate	13,798	6,328	90.8	1.5	1.3	0.2	6.3	0.5	0.5
Unknown	265	135	47.2	20.3	9.0 *	0.0 †	23.5	12.5	23.3
Age & Education									
18-24 years &									
Less than 12 years	2,441	1,116	36.5	24.7	1.5	0.9	36.4	0.6 *	24.2
12 years	5,629	2,504	59.3	11.3	1.5	1.2	26.7	0.3 *	9.3
Some college	3,928	1,701	76.0	4.8	1.1	0.8	17.3	0.3 *	2.8
College graduate	976	410	84.3	1.4 *	1.5 *	0.2 *	12.6	0.2 *	0.1 *
Unknown	31	15	53.9	10.6 *	20.3 *	0.0 †	15.2 *	14.2 *	30.9 *
25-44 years &									
Less than 12 years	5,120	2,452	45.2	21.3	2.0	0.3 *	31.2	2.2	21.4
12 years	16,072	7,591	76.0	6.9	1.5	0.3	15.2	0.7	6.4
Some college	9,406	4,377	82.8	4.3	1.1	0.1 *	11.7	0.6	3.2
College graduate	9,402	4,317	91.7	1.2	0.8	0.2 *	6.0	0.3	0.5
Unknown	147	72	47.1	21.3	12.1 *	0.0 †	19.5	10.3 *	28.1
45-64 years									
Less than 12 years	6,044	2,969	56.8	15.6	4.7	0.5 *	22.5	7.5	13.2
12 years	10,592	4,964	82.3	3.9	4.1	0.3 *	9.3	2.9	2.4
Some college	3,902	1,824	85.0	3.1	4.1	0.3 *	7.5	2.2	2.4
College graduate	3,420	1,601	90.0	2.1	2.5	0.1 *	5.2	1.4	0.7 *
Unknown	88	48	44.9	22.2	0.0 †	0.0 †	32.9	15.6 *	12.5 *
Marital Status									
Married	49,978	23,073	81.2	4.1	2.1	0.3	12.3	1.1	2.5
Widowed	2,795	1,358	61.0	13.5	5.2	0.4 *	19.8	7.6	9.1
Divorced	7,030	3,397	65.1	13.2	1.7	0.3	19.7	2.7	13.2
Separated	2,400	1,211	45.9	27.6	2.9	0.7 *	22.8	3.2	27.6
Never married	14,899	6,877	64.6	11.6	2.2	0.6	21.0	1.8	12.1
Unknown	94	45	56.8	7.9 *	3.4 *	0.0 †	31.9	3.5 *	11.3 *
Employment Status									
Currently employed	51,186	23,685	82.9	2.3	1.4	0.3	13.2	0.4	1.6
Unemployed	2,271	1,090	52.2	16.1	2.0	0.5 *	29.2	0.6 *	14.9
Not in labor force	23,740	11,186	59.2	17.8	4.0	0.6	18.4	4.6	15.9
Employment Status & Age									
Currently employed &									
18-24 years	8,430	3,662	71.4	4.0	0.9	0.8	23.0	0.2 *	2.3
25-44 years	28,782	13,417	84.7	2.2	1.1	0.2	11.9	0.3	1.7
45-64 years	13,974	6,606	86.0	1.6	2.3	0.2 *	9.9	0.6	0.9

TABLE B. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only %	Public Only %	Private and Public %	Undefined Plans Only %	Not Insured %	Medicare %	Medicaid %
Unemployed &									
18-24 years	666	304	42.2	20.6	1.7 *	1.5 *	34.1	0.2 *	19.7
25-44 years	1,201	582	54.5	16.4	1.5 *	0.2 *	27.3	0.4 *	15.7
45-64 years	405	204	61.9	7.6	3.8 *	0.0 †	26.7	2.1 *	4.9
Not in labor force &									
18-24 years	3,909	1,780	45.0	24.8	2.5	1.2	26.5	0.8	23.4
25-44 years	10,164	4,810	58.8	19.1	2.1	0.4	19.5	2.4	18.0
45-64 years	9,667	4,596	65.3	13.6	6.5	0.5	14.0	8.4	10.7
Family Income									
Under $5,000	3,535	1,700	32.0	35.1	3.0	0.9	28.9	4.2	35.0
$5,000-$6,999	2,212	1,053	26.0	37.4	3.5	0.6 *	32.5	7.2	35.6
$7,000-$9,999	3,106	1,562	29.8	31.3	2.8	0.6 *	35.5	4.3	30.4
$10,000-$14,999	6,902	3,305	48.9	13.3	2.8	0.7	34.3	3.2	11.7
$15,000-$19,999	8,759	4,165	65.7	7.2	2.3	0.5	24.2	2.4	5.9
$20,000-$24,999	6,176	2,867	77.0	5.5	2.3	0.5 *	14.8	1.3	3.3
$25,000-$34,999	14,958	6,880	83.9	2.7	2.2	0.4	10.9	1.2	1.4
$35,000-$49,999	16,277	7,478	88.8	1.8	1.7	0.1 *	7.6	0.5	0.9
$50,000 or more	15,271	6,951	92.5	1.0	1.8	0.2 *	4.5	0.5	0.4
Poverty Level									
Under 0.50	3,231	1,575	25.4	40.0	2.9	0.8	31.0	2.0	40.5
0.50 to under 1.00	5,661	2,780	28.8	32.9	2.4	0.8	35.1	5.0	31.7
1.00 to under 1.25	3,329	1,625	44.2	16.6	2.1	0.5 *	36.6	3.2	14.7
1.25 to under 1.50	3,757	1,831	54.8	12.3	2.2	0.8	30.0	2.8	10.3
1.50 to under 1.75	5,458	2,596	69.0	6.4	2.5	0.3 *	21.8	1.8	5.3
1.75 to under 2.00	8,971	4,171	78.5	4.0	1.9	0.5	15.1	1.6	2.7
2.00 and above	46,789	21,383	87.3	1.9	2.1	0.3	8.4	1.0	0.9
Age and Poverty Level									
18-24 years &									
Under 0.50	1,290	590	45.5	26.1	1.9 *	1.1 *	25.3	0.3 *	25.4
0.50 to under 1.00	1,564	712	36.9	26.3	0.8 *	1.3 *	34.7	0.5 *	24.7
1.00 to under 1.25	822	374	38.5	21.0	1.0 *	0.0 †	39.5	0.5 *	18.4
1.25 to under 1.50	799	378	48.6	16.1	1.4 *	1.3 *	32.6	0.4 *	13.4
1.50 to under 1.75	1,018	460	52.5	9.2	2.0 *	1.0 *	35.3	0.2 *	7.6
1.75 to under 2.00	1,726	756	69.5	5.6	1.6 *	1.2 *	22.2	0.5 *	3.8
2.00 and above	5,785	2,476	77.0	3.5	1.4	0.8	17.3	0.3 *	2.1
25-44 years &									
Under 0.50	1,494	744	10.6	52.6	3.3	0.6 *	32.8	2.1 *	54.6
0.50 to under 1.00	2,665	1,338	25.8	34.0	2.4	0.6 *	37.3	3.1	34.0
1.00 to under 1.25	1,690	829	48.2	14.8	1.7 *	0.3 *	35.0	1.9	13.9
1.25 to under 1.50	1,918	919	58.5	8.7	1.7	0.3 *	30.7	1.3 *	8.2
1.50 to under 1.75	3,333	1,590	75.9	5.4	1.5	0.0	17.2	0.8 *	4.1
1.75 to under 2.00	5,272	2,470	83.0	2.9	1.2	0.4 *	12.5	0.7	2.0
2.00 and above	23,775	10,919	89.7	1.3	1.1	0.2	7.8	0.4	0.6
45-64 years &									
Under 0.50	447	241	16.3	37.6	4.4 *	0.2 *	41.5	6.4	36.9
0.50 to under 1.00	1,432	730	25.6	38.1	4.2	0.5 *	31.6	13.4	35.1
1.00 to under 1.25	817	422	41.8	15.8	3.9	1.4 *	37.0	8.4	12.6
1.25 to under 1.50	1,040	534	52.5	16.1	3.6	1.2 *	26.6	7.4	11.9
1.50 to under 1.75	1,108	546	63.7	6.7	6.0	0.3 *	23.3	6.3	6.8
1.75 to under 2.00	1,973	945	74.1	5.6	4.2	0.4 *	15.8	5.1	3.6
2.00 and above	17,229	7,988	87.6	2.2	3.9	0.2	6.2	2.2	0.8

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE A-1.
* Estimate has low statistical reliability (relative standard error > 30%).
† Estimate is exactly 0 or standard error is indeterminate.

receive Medicaid—the highest of any group—they are more than twice as likely as married people to be uninsured (t=11.75, p<.001). Of those who are separated, women are much more likely than men to receive Medicaid (27.6% versus 6.3%, t=10.97, p<.001), reflecting the linkage of Aid to Families with Dependent Children (AFDC) with Medicaid eligibility.

Employment is the gateway to private health insurance coverage. About 83.0% of people who worked in the two weeks prior to being interviewed have private coverage. Less than 4% of people who worked in the two weeks prior to being interviewed have public insurance, and 15.1% are uninsured. The working uninsured, numbering 17.1 million people, make up about 68% of all uninsured working-aged people.

A small percentage of the employed receive Medicare (0.3%). However, this estimate translates to 13.9% of all people on Medicare aged 18 to 64 who work. This appears to be a large fraction, given the expectation that few Medicare beneficiaries work.[6] Several other surveys provide estimates for the working age population who receive SSDI benefits (all of whom receive Medicare after a two-year waiting period) or who are covered by Medicare and are employed. In the 1984 SIPP, 5.0% of SSDI recipients were employed (Martini, 1990). In the 1990 CPS, 16.3% of the 3.2 million people aged 16 to 64 who were covered by Medicare any time during the year worked during the year (U.S. Bureau of the Census, 1991a). Much of this work was irregular: only 3.7% of those on Medicare worked year-round, full-time. Therefore, it may be concluded that most of the work reported by Medicare beneficiaries is at a low capacity. This is as expected, given the fact that the Social Security "substantial gainful activity" eligibility standard was set at monthly earnings less than $300 in 1989.[7]

Several reasons can be given as to why surveys yield higher estimates of people on Medicare who are working than do administrative records. First, people with end-stage renal disease (ESRD) are covered by Medicare whether or not they work. The ESRD program is separate from the SSDI program. Of the 3.1 million Medicare beneficiaries under age 65, about 58,000 have ESRD only (Social Security Administration, 1990). If all ESRD recipients worked, this could add almost 2% to survey estimates that do not separate out this population. Second, in a confidential survey, people may report work events they are reluctant to report to the Social Security Administration for fear of losing benefits. Third, if working individuals erroneously think they are covered by Medicare, this will inflate estimates of the percent on Medicare who work.

Being out of the work force is associated with much lower rates of private insurance coverage, higher rates of public insurance coverage, and higher rates of uninsurance. The unemployed are 40% less likely than the employed to have private insurance (47.4% versus 83.0%, t=28.8, p<.001), and 39.9% are uninsured. Unemployed people without private health insurance are often viewed as having lost coverage, but a substantial number may have had jobs that did not provide insurance. Beginning in 1985, federal COBRA legislation requires employee group health plans to offer continued coverage to terminated workers and their dependents at group rates (plus 2% administration fee) for up to 18 months (29 months if eligible for SSI or SSDI and 36 months for death and other events). This may enable unemployed workers to keep private insurance, if they can afford to pay the premiums. About 10.7% of the unemployed receive Medicaid, reflecting the association of unemployment with poverty and serving as a reminder that many unemployed may not be able to pay to continue coverage under COBRA. Only a few of the unemployed receive Medicare (less than 1%). The unemployed make up about 7% of all uninsured adults.

People without a job and who are not looking for work (not in the labor force), are more likely than employed or unemployed people to have a serious disability and to be aided by public programs: 7.4% receive Medicare and 15.4% receive Medicaid. Those not in the labor force are half as likely as the unemployed to be uninsured (19.3% versus 39.9%, t=15.85, p<.001) and are more likely than the employed to be uninsured (19.3% versus 15.1%, t=7.80, p<.001). They make up about 25% of all uninsured adults.

The proportion of the employed with private insurance increases with age from 69.2% at ages 18 to 24 to 88.6% at ages 45 to 64, reflecting age differences in the

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[6] SSDI beneficiaries can test their ability to work during a 45 month period without losing SSDI benefits or Medicare coverage (U.S. House of Representatives & Committee on Ways and Means, 1992). Beneficiaries may earn more than the SGA level during a "trial work period" of 9 months (which may not be consecutive within a 5 year period) with no effect on cash benefits or Medicare coverage as long as they remain severely impaired according to program standards. Income below $200 per month ($190 in 1989) is not counted. After that, they are granted an extended period of eligibility that can last up to 36 months (hence 45 total months) during which they can continue to receive cash benefits if they fail to work above the SGA level. However, if they earn more than the SGA level for three months, cash benefits stop. Depending on when cash payments cease, Medicare coverage may continue for 3 to 24 months, but not to exceed 48 months total. If Medicare eligibility ends because of such work activity, and the former beneficiary remains severely impaired by program eligibility standards, he or she may purchase Medicare protection (so-called Medicare buy-in). These "work incentives" have not been very effective. On an annual basis, less than 1% of SSDI beneficiaries leave the rolls to engage in work above SGA. A somewhat larger, but still quite small percentage engage in trial work, but are unsuccessful in leaving the rolls (Muller, 1992).

[7] Martini (1990) found in the 1984 SIPP that average earnings of people receiving SSDI or SSI were $507 per month and explains that this could be due to imputation of SSDI benefits and of missing earnings, as well as individuals being permitted to earn more than the SGA level during a Trial Work Period under SSDI and the Section 1619 waiver program under SSI. About 8% of people aged 18 to 64 on SSI worked in December, 1988 (Scott, 1992). The average monthly earnings was $92.

nature of work and employment-related benefits. Part-time jobs, for example, are less likely to provide health insurance. It is not possible to distinguish full-time from part-time work in the NHIS, but estimates from the CPS for 1989 indicate that employees under age 25 are much more likely to be working part-time—17.2% of male employees aged 20-24 worked part-time compared to 3.9% at ages 25 to 54, whereas 26.4% of female employees aged 20 to 24 worked part-time compared to 20.1% at ages 25 to 54 (U.S. Bureau of the Census, 1991c, Table 649). Older workers also have better benefits as a result of having higher status jobs.

Unemployed workers aged 45 years and older are more likely to have private coverage than those under 45 (64.4% versus 41.8%, t=6.39, p<.001). Older unemployed workers are more likely than younger unemployed workers to have had jobs that provided insurance, and may be better able than younger unemployed workers to afford to continue any health insurance they had.

Among people not in the labor force, younger adults are more likely to receive Medicaid than Medicare, reflecting the high degree of poverty in this population. The proportion with private insurance and the proportion with Medicare coverage increase with age. At ages 45 to 64, 9.6% have both private and public insurance. In addition to private insurance, 5.8% have Medicare, 2.6% have military, and 1.3% have Medicaid (Table 1). Close to 45% of people aged 45 to 64 who are not in the labor force and who receive Medicare have private insurance coverage as do 44% of people who have military coverage. In contrast, 11% of people with Medicaid have private insurance.

Almost all people (93.6%) in families with incomes of $50,000 or more have private insurance and only 5.3% are uninsured. Although Medicaid covers about a quarter of people with family incomes under $10,000, more than a third are uninsured. In families with incomes twice the poverty level, 88.3% have private insurance, declining to 29.5% of people in families with incomes below half the poverty level. About 40% of working-age adults in families with incomes below 125% of the poverty line are uninsured. Just above the poverty threshold, Medicaid coverage drops by 14.5 percentage points, but private coverage rises 14.2 percentage points, and the rate of uninsurance remains as high for people near poverty as for people in poverty. At 150% of poverty and above, public coverage is below 6% and declines further with increasing income, as does the rate of uninsurance.

Adults aged 25 and older in extreme poverty rely heavily on public coverage—over 40% are covered by public plans alone, mainly Medicaid. Those aged 18 to 24 in poverty have a higher rate of private coverage than older poor people. Some are covered by parents' policies, particularly if they are still attending school and are single. At ages 25 and above, people with family incomes less than half the poverty threshold have the lowest level of private coverage—12.6% at ages 25 to 44 and 17.5% at ages 45 to 64—and though they have high rates of Medicaid coverage, about 42% are uninsured. Thus, about 5 million extremely poor adults aged 18 to 64 are highly dependent on public insurance, but at the same time they face the eligibility limitations of public assistance programs, and 37.9% are uninsured.

Medicare is correlated with poverty, especially at the older working ages, but not as strongly as is Medicaid coverage. These data reconfirm our expectations: Medicaid covers the poor—but not all poor—and Medicare covers the older working-age population with disabilities, particularly those out of the labor force and with low educational attainment, characteristics that are associated with poverty.

Gender

Similar themes occur for men and women, but with different emphases. Men and women have identical levels of private coverage, but women are more likely to have public coverage (7.5% versus 3.8% with public only, t=17.5, p<.001) and men are more likely to be uninsured (18.3% versus 15.3%, t=7.5, p<.001). Women are almost three times as likely to be covered by Medicaid (6.4% versus 2.3%, t=18.33, p<.001). Below age 45, men are about 30% more likely than women to be uninsured (for ages 18 to 24, t=7.1; for ages 25 to 44, t=6.40; both p<.001), but at ages 45 and above, women are about 13% more likely to be uninsured than men (t=3.30, p<.001). Women who are black or who have not completed high school or who are of Hispanic origin are about three times as likely as men in these categories to be covered by Medicaid. Among unemployed people aged 25 to 44, men are more than twice as likely as women to be uninsured (55.4% versus 27.3%, t=9.0, p<.001).

Among men and women both, the poor are most likely to be uninsured. But men ages 25 to 44 who are poor are the only group more likely to be uninsured than to have insurance: 62.0% of men aged 25 to 44 with family incomes less than half the poverty threshold are uninsured (Figure 1), a rate 90% higher than among women (t=7.60, p<.001). Of those in poverty aged 25 to 44, women are 2.5 times as likely as men to have Medicaid (t=9.84, p<.001). Thus, for poor women, public insurance compensates for lack of access to private insurance, though it does not do so completely, and a third remain uninsured. For poor men, public insurance compensates to a much smaller degree, and two-thirds remain uninsured.

For poor people aged 45 to 64, the rate of uninsurance is similar for men and women, with women somewhat more likely to be covered by Medicaid than men (e.g., at incomes under 0.50 times poverty, t=2.43, p<.05), and the reverse occurring for Medicare (e.g., at incomes 0.50 to under 1.00 times poverty, t=2.17, p<.05). Because older men and women alike can receive SSI and SSDI, public insurance compensates for lack of access to private insurance more equitably by gender.

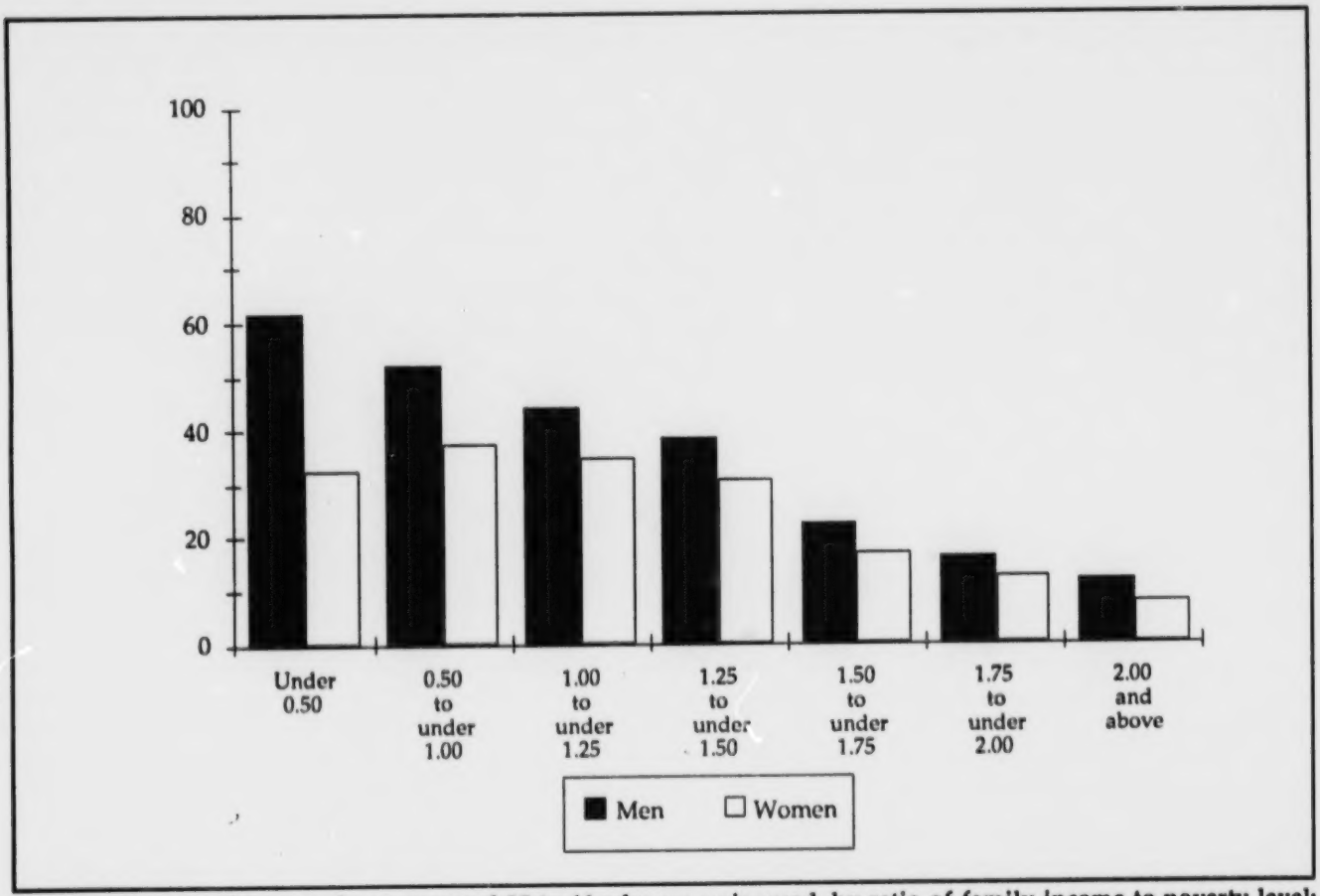

Figure 1. Percent of men and women aged 25 to 44 who are uninsured, by ratio of family income to poverty level: United States, 1989

Disability and poor health

Disability does affect one's chance of being uninsured. Among adults, the disabled population, similar to other sociodemographic groups, has significantly less access to private insurance (62.9% versus 79.3%). But they are more likely to have public insurance or to have both public and private insurance, and are much more likely to be covered by Medicare or by Medicaid. With respect to uninsurance, people with disabilities fare a little worse than the rest of the population. The rate of uninsurance is statistically significantly higher for adults with activity limitation than for those with no limitation (Table C): of the estimated 19.8 million adults aged 18 to 64 with activity limitation, 17.5% were uninsured compared to 16.3% of adults without activity limitation (t=2.05, p<.05). People with disabilities fare better than black and Hispanic minority populations and the poor.

However, the uninsurance rate varies by severity of disability (Figure 2). People with the most severe disabilities are in fact *less* likely to be uninsured than those without a disability. About 12.1% of people with limitations in self-care (ADL) are uninsured (Table D), significantly lower than the 16.6% of people not limited in activity (t=2.23, p<.05). People who need assistance in routine activities (IADL) are also less likely to be uninsured than those not limited in activity (13.5% versus 16.6%, t=2.72, p<.01).

The majority of people with the most severe disabilities are unable to work (87.1% of those needing assistance in self-care and 74.4% of those needing assistance in routine activities). As just described, people with assistance needs in basic life activities experience a lower rate of uninsurance than others who are unable to work (Table D). Cross-tabulating categories of basic life activities with work disability enables the data to be reorganized into a more meaningful scale (Table E). Among people who do not need assistance in basic life activities, those unable to work are in fact more likely than those without limitation to be uninsured (19.1% versus 16.6%, t=2.93, p<.01). Likewise, people who are limited in the amount or kind of work they can do are more likely than those without limitation to be uninsured (20.2% versus 16.6%, t=3.79, p<.001). However, the rate of uninsurance among people limited in activities other

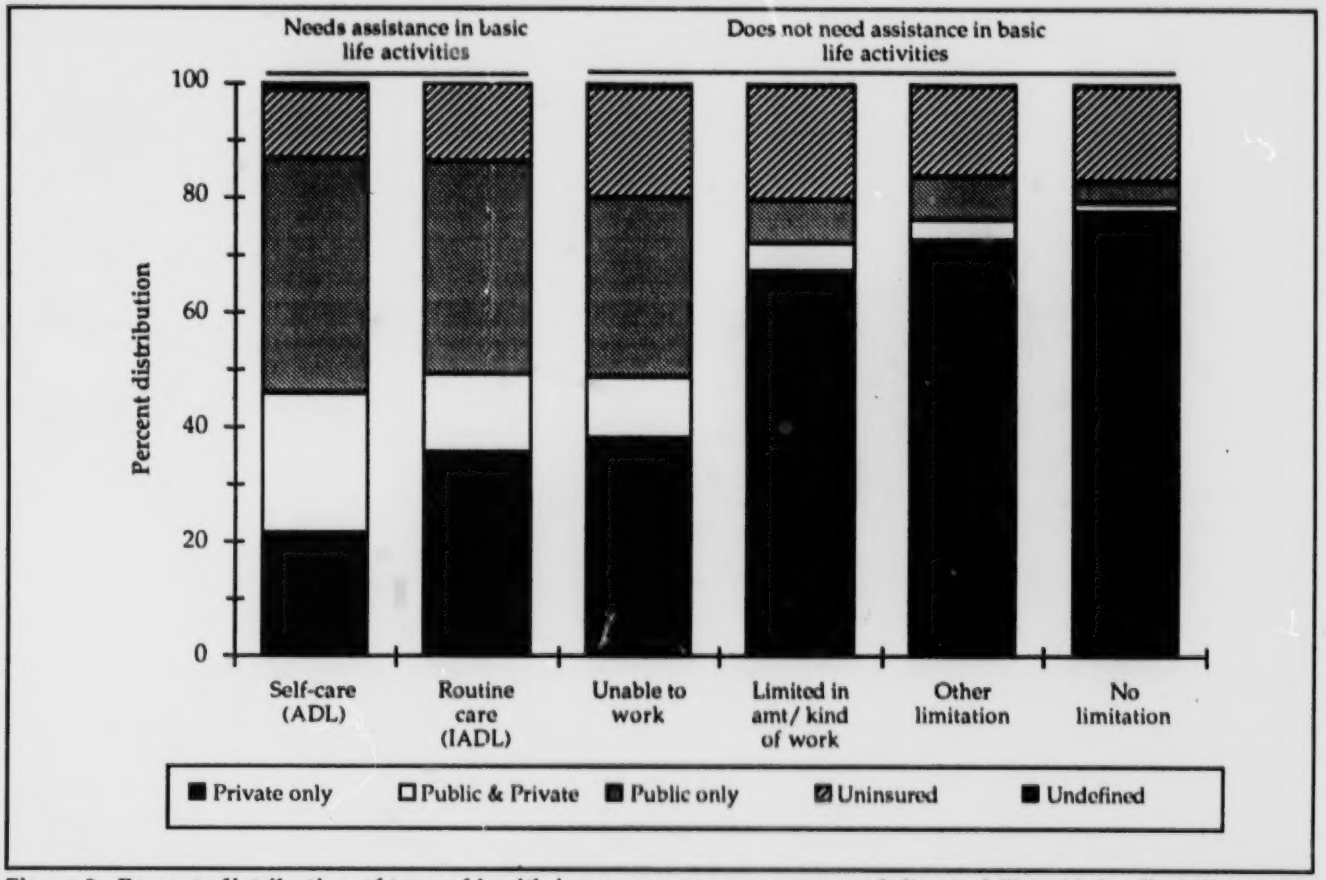

Figure 2. Percent distribution of type of health insurance coverage among adults aged 18 to 64, by disability status: United States, 1989

than work (16.0%) is the same as for those without limitation.

Whether measured by major activity limitation, work limitation, or limitation in basic life activities, private insurance coverage declines with increasing severity of disability, while public insurance coverage rises (Table D). Inability to work is a central concept to eligibility for federal disability benefits among working-age people. Almost 8 million people aged 18 to 64 are classified in the NHIS as unable to work at a job or business. This group is half as likely as people not limited in activity to be covered solely by private insurance (34.3% versus 66.3%, t=41.7, p<.001) and more than 8 times as likely to have public insurance (30.9% versus 3.7% have public insurance alone, t= 36.6, p<.001; 13.2% versus 1.6% have both public and private insurance, t=19.6, p<.001). Compared to people with less severe work disability, people unable to work have much lower private insurance coverage (Figure 2). Since employment is the gateway to private insurance, people who are unable to work are at greater risk of not having private insurance. Certainly, the proportion with private coverage would be even lower if people were not able to continue coverage with their former employers or were not covered by a spouse's plan. At the same time, inability to work is a threshold for public insurance which is targeted towards certain people who are unable to work.

About a quarter of people who are unable to work are covered by Medicare and about another quarter by Medicaid (Table D). At least 29% of those on Medicare have Medicaid as well (Table 2). Medicaid pays the deductibles and copayments for Medicare beneficiaries. About 1.2% of people unable to work have private insurance, Medicare, and Medicaid, a curious result since it is not clear why people would retain private coverage if they are entitled to Medicare and Medicaid.

Medicare coverage drops from 23.9%, for people unable to work, to 3% for other people with disabilities, and to 0.4% for those without a limitation. Medicare is not exclusively targeted to those who say they are unable to work: only 67.6% of people aged 18 to 64 on Medicare state that they are unable to work, while 6.7% are limited in the amount or kind of work they can do, 5.6% are limited in other activities, and 20.2% are not limited in

TABLE C. Type of Health Insurance Coverage Among Children and Adults, by Disability: United States, 1989

	Total		With Insurance								Not Insured		Medicare		Medicaid	
			Private Only		Public Only		Private and Public		Undefined plans							
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
	Number of people in thousands															
Under age 65	214,314	0	156,775	2,441	16,475	591	4,804	182	974	74	35,286	895	2,964	96	14,196	561
With activity limitation	23,198	425	12,788	295	4,472	151	1,742	65	133	21	4,062	136	2,274	75	3,752	145
Without activity limitation	191,116	2,759	143,986	2,268	12,003	504	3,062	154	841	68	31,224	819	690	50	10,444	469
Ages 0-17	64,005	0	44,522	870	7,950	349	1,058	86	355	41	10,120	437	141	26	7,562	348
With activity limitation	3,438	117	1,986	81	771	61	122	17	12	5	547	43	20	7	831	65
Without activity limitation	60,567	1,062	42,536	836	7,179	328	936	79	342	41	9,574	414	121	25	6,731	321
Ages 18-64	150,309	0	112,253	1,701	8,525	281	3,746	135	620	53	25,165	547	2,823	89	6,635	239
With activity limitation	19,760	362	10,802	253	3,700	122	1,620	66	121	21	3,515	116	2,254	74	2,921	115
Without activity limitation	130,549	1,875	101,450	1,561	4,824	210	2,126	104	499	45	21,650	497	569	40	3,713	166
	Percent distribution															
Under age 65	100.0	---	73.2	0.5	7.7	0.3	2.2	0.1	0.5	0.0	16.5	0.3	1.4	0.0	6.6	0.2
With activity limitation	100.0	---	55.1 #	0.7	19.3 #	0.6	7.5 #	0.3	0.6 ‡	0.1	17.5 ‡	0.5	9.8 #	0.3	16.2 #	0.6
Without activity limitation	100.0	---	75.3	0.5	6.3	0.3	1.6	0.1	0.4	0.0	16.3	0.4	0.4	0.0	5.5	0.2
Ages 0-17	100.0	---	69.6	0.8	12.4	0.5	1.7	0.1	0.6	0.1	15.8	0.6	0.2	0.0	11.8	0.5
With activity limitation	100.0	---	57.8 #	1.5	22.4 #	1.5	3.5 #	0.5	0.4	0.1	15.9	1.2	0.6 ‡	0.2	24.2 #	1.6
Without activity limitation	100.0	---	70.2	0.8	11.9	0.5	1.5	0.1	0.6	0.1	15.8	0.6	0.2	0.0	11.1	0.5
Ages 18-64	100.0	---	74.7	0.4	5.7	0.2	2.5	0.1	0.4	0.0	16.7	0.3	1.9	0.1	4.4	0.2
With activity limitation	100.0	---	54.7 #	0.7	18.7 #	0.6	8.2 #	0.3	0.6	0.1	17.8 ‡	0.5	11.4 #	0.4	14.8 #	0.5
Without activity limitation	100.0	---	77.7	0.4	3.7	0.2	1.6	0.1	0.4	0.0	16.6	0.3	0.4	0.0	2.8	0.1

Source: National Health Interview Survey (author's tabulations from public use tapes).
‡ Significantly different from people not limited in activity, $p<0.05$ (two-tailed t-test).
§ Significantly different from people not limited in activity, $p<0.01$ (two-tailed t-test).
# Significantly different from people not limited in activity, $p<0.001$ (two-tailed t-test).

TABLE D. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only (%)	Public Only (%)	Private and Public (%)	Undefined Plans Only (%)	Not Insured (%)	Medicare (%)	Medicaid (%)
Total	150,309	68,211	74.7	5.7	2.5	0.4	16.7	1.9	4.4
Health Status									
Excellent	57,392	25,595	81.1	2.5	1.6	0.3	14.5	0.4	1.6
Very good	44,376	20,088	79.0	3.8	1.9	0.3	15.0	0.9	2.8
Good	34,491	15,846	69.2	7.0	2.6	0.5	20.7	1.7	5.8
Fair	10,016	4,742	53.9	16.9	6.2	0.9	22.1	7.9	14.1
Poor	3,554	1,713	30.6	36.0	12.8	0.5 *	20.1	23.5	27.5
Unknown	480	227	63.3	9.0	0.9 *	0.4 *	26.4	0.4 *	8.5 *
Major Activity									
Unable to perform major activity	6,772	3,226	34.1	33.9	13.5	1.0	17.4	25.0	25.6
Limited in amount/kind of major activity	7,498	3,465	62.7	10.8	6.5	0.6	19.4	5.0	9.2
Limited in other activity	5,490	2,540	69.1	10.9	3.9	0.1 *	16.1	3.3	9.0
Not limited in activity	130,549	58,980	77.7	3.7	1.6	0.4	16.6	0.4	2.8
Work Activity									
Unable to work	7,980	3,818	34.3	34.3	13.2	0.9	17.3	23.9	26.8
Limited in amount/kind of work	6,776	3,106	66.3	8.0	5.4	0.5	19.8	2.8	6.7
Limited in other activity	5,004	2,307	71.5	8.5	4.0	0.3 *	15.8	3.2	6.6
Not limited in activity	130,549	58,980	77.7	3.7	1.6	0.4	16.6	0.4	2.8
Basic Life Activities									
Needs help in self care (ADL)	780	370	21.2	40.8	24.7	1.3 *	12.1	35.8	36.9
Needs help in routine activities (IADL)	2,210	1,067	35.6	36.9	13.8	0.3 *	13.5	25.6	30.7
Not limited in basic life activities	147,320	66,774	75.6	5.0	2.2	0.4	16.8	1.3	3.8
Work Activity & Basic Life Activities									
Unable to work &									
Needs help in self care (ADL)	680	325	18.4	42.2	26.4	0.6 *	12.4	38.7	38.1
Needs help in routine activities (IADL)	1,644	800	28.8	41.9	15.9	0.2 *	13.3	30.7	34.3
Not limited in basic life activities	5,656	2,693	37.8	31.2	10.9	1.1	19.1	20.2	23.2
Limited in amount/kind of work &									
Needs help in self care (ADL)	59	25	40.3 *	25.0 *	17.0 *	7.1 *	10.6 *	15.8 *	28.3 *
Needs help in routine activities (IADL)	355	167	57.8	19.1	7.7	0.0 †	15.4	10.1	17.3
Not limited in basic life activities	6,362	2,914	67.0	7.2	5.2	0.5	20.2	2.3	5.9
Limited in other activity &									
Needs help in self care (ADL)	40	19	36.6 *	40.1	8.5 *	5.2 *	9.5 *	18.2 *	30.1 *
Needs help in routine activities (IADL)	201	94	52.2	27.1	8.6 *	1.0 *	11.1 *	10.7 *	24.1
Not limited in basic life activities	4,763	2,194	72.6	7.4	3.7	0.3 *	16.0	2.7	5.7
Not limited in activity &									
Needs help in self care (ADL)	1 *	1	100.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	10 *	6	24.5 *	50.4 *	0.0 †	0.0 †	25.2 *	31.9 *	39.8 *
Not limited in basic life activities	130,538	58,973	77.7	3.7	1.6	0.4	16.6	0.4	2.8
Work Activity & Health Status									
Unable to work &									
Excellent	369	172	50.5	17.8	10.0	0.5 *	21.3	16.2	17.1
Very good	669	304	48.3	25.9	8.2	1.8 *	15.8	18.5	19.3
Good	1,874	879	42.3	27.0	10.2	0.5 *	20.0	18.0	21.5
Fair	2,537	1,234	33.1	35.1	15.0	1.1	15.7	24.6	28.1
Poor	2,490	1,208	23.3	43.5	15.7	0.7 *	16.8	30.5	32.7
Unknown	40 *	21	29.2 *	47.1	0.0 †	5.3 *	18.4 *	5.3 *	36.5 *
Limited in amount/kind of work &									
Excellent	779	351	66.9	7.4	6.1	0.7 *	18.9	2.7	7.2
Very good	1,534	687	74.4	5.9	4.1	0.2 *	15.4	2.5	4.3
Good	2,480	1,129	66.2	8.3	5.8	0.6 *	19.2	2.5	6.8
Fair	1,587	747	60.5	9.1	5.3	0.8 *	24.2	3.1	8.2
Poor	375	180	57.5	10.9	7.3	0.0 †	24.3	5.5 *	7.8
Unknown	21 *	12	44.0 *	0.0 †	9.1 *	0.0 †	46.9 *	0.0 †	9.1 *

TABLE D. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only (%)	Public Only (%)	Private and Public (%)	Undefined Plans Only (%)	Not Insured (%)	Medicare (%)	Medicaid (%)
Limited in other activity &									
Excellent	823	369	79.2	3.9	3.7	0.3 *	12.9	0.8 *	2.1 *
Very good	1,441	646	78.3	4.4	5.1	0.1 *	12.1	1.9	3.4
Good	1,637	767	72.2	8.2	2.8	0.3 *	16.5	2.0	6.9
Fair	849	400	59.6	13.4	3.9	0.8 *	22.3	6.2	10.4
Poor	235	117	41.2	33.6	7.0 *	0.0 †	18.2	16.0	26.6
Unknown	18	8	67.1	0.0 †	0.0 †	0.0 †	32.9 *	0.0 †	0.0 †
Not limited in activity &									
Excellent	55,420	24,703	81.5	2.3	1.4	0.3	14.4	0.3	1.5
Very good	40,733	18,451	79.7	3.3	1.7	0.3	15.0	0.5	2.5
Good	28,501	13,071	71.0	5.5	1.8	0.5	21.1	0.5	4.6
Fair	5,043	2,361	61.2	10.8	2.5	0.8 *	24.7	1.3	9.4
Poor	453	208	42.5	16.6	4.8 *	0.0 †	36.1	3.9 *	15.5
Unknown	399	186	67.6	6.0 *	0.5 *	0.0 †	25.8	0.0 †	6.0 *
All Men	73,112	32,250	74.7	3.8	2.8	0.4	18.3	2.1	2.3
Health Status									
Excellent	30,711	13,376	80.8	1.3	1.7	0.3	16.0	0.4	0.6
Very good	21,151	9,325	78.7	2.2	2.2	0.3	16.7	0.8	1.4
Good	15,155	6,736	68.6	4.4	3.1	0.6	23.3	2.0	2.9
Fair	4,131	1,895	51.7	14.8	8.2	1.3	24.1	10.7	9.7
Poor	1,754	818	29.2	34.7	16.2	0.8 *	19.2	28.7	21.3
Unknown	212	100	56.8	9.6 *	1.0 *	1.0 *	31.6	0.0 †	8.6 *
Major Activity									
Unable to perform major activity	3,801	1,774	29.9	34.8	16.2	1.4	17.7	30.0	22.4
Limited in amount/kind of major activity	3,394	1,511	62.8	7.7	7.6	0.6 *	21.2	4.0	5.0
Limited in other activity	2,232	988	74.7	5.4	4.9	0.1 *	14.9	2.1	3.4
Not limited in activity	63,685	27,977	78.0	1.6	1.7	0.4	18.3	0.3	1.0
Work Activity									
Unable to work	3,867	1,807	29.5	35.8	16.0	1.4	17.3	30.3	23.1
Limited in amount/kind of work	3,291	1,463	63.4	7.1	7.5	0.6 *	21.4	3.3	4.8
Limited in other activity	2,270	1,003	75.4	3.8	5.1	0.2 *	15.5	1.8	1.9
Not limited in activity	63,685	27,977	78.0	1.6	1.7	0.4	18.3	0.3	1.0
Basic Life Activities									
Needs help in self care (ADL)	365	172	18.3	41.4	30.0	1.9 *	8.4	47.7	32.5
Needs help in routine activities (IADL)	812	385	25.6	44.0	17.5	0.1 *	12.8	37.1	28.8
Not limited in basic life activities	71,935	31,693	75.5	3.1	2.5	0.4	18.4	1.5	1.9
Work Activity & Basic Life Activities									
Unable to work &									
Needs help in self care (ADL)	331	156	17.0	42.6	30.8	0.9 *	8.7	49.8	32.2
Needs help in routine activities (IADL)	663	318	20.9	47.7	18.8	0.1 *	12.4	40.5	31.4
Not limited in basic life activities	2,872	1,333	32.9	32.3	13.7	1.8	19.4	25.7	20.1
Limited in amount/kind of work &									
Needs help in self care (ADL)	23 *	10	29.4 *	26.7 *	16.8 *	18.4 *	8.7 *	25.4 *	35.3 *
Needs help in routine activities (IADL)	119	52	43.4	28.3	12.8 *	0.0 †	15.4 *	21.2 *	21.8
Not limited in basic life activities	3,150	1,401	64.4	6.2	7.2	0.5 *	21.7	2.5	4.0
Limited in other activity &									
Needs help in self care (ADL)	10 *	5	24.3 *	41.7 *	33.9 *	0.0 †	0.0 †	33.9 *	40.3 *
Needs help in routine activities (IADL)	29	14	60.3	24.9 *	7.8 *	0.0 †	7.0 *	26.1 *	0.0 †
Not limited in basic life activities	2,231	984	75.8	3.3	4.9	0.2 *	15.7	1.3	1.8
Not limited in activity &									
Needs help in self care (ADL)	1 *	1	100.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	1 *	1	0.0 †	0.0 †	0.0 †	0.0 †	100.0 †	0.0 †	0.0 †
Not limited in basic life activities	63,682	27,975	78.0	1.6	1.7	0.4	18.3	0.3	1.0

TABLE D. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only (%)	Public Only (%)	Private and Public (%)	Undefined Plans Only (%)	Not Insured (%)	Medicare (%)	Medicaid (%)
Work Activity & Health Status									
Unable to work &									
Excellent	213	99	50.2	18.8	11.9	0.9 *	18.3	20.1	16.3
Very good	327	144	44.2	28.9	8.2 *	3.7 *	15.0	17.9	21.3
Good	848	394	36.2	29.6	12.3	1.2 *	20.8	23.4	19.8
Fair	1,179	555	26.0	36.5	18.9	1.3 *	17.4	33.1	23.3
Poor	1,275	602	21.1	43.8	18.9	1.0 *	15.2	37.8	26.4
Unknown	25 *	13	22.0 *	47.6 *	0.0 †	8.6 *	21.7 *	0.0 †	38.9 *
Limited in amount/kind of work &									
Excellent	442	195	62.2	6.8	8.6	1.1 *	21.3	2.8 *	6.3
Very good	767	338	71.7	5.7	6.3	0.0 †	16.4	3.5	3.9
Good	1,189	524	63.6	8.3	7.5	0.4 *	20.2	3.0 *	5.1
Fair	694	314	55.9	6.1	7.5	1.4 *	29.1	3.4 *	4.1
Poor	189	87	60.3	10.6 *	10.1 *	0.0 †	19.0	6.1 *	6.2 *
Unknown	9 *	5	36.5 *	0.0 †	0.0 †	0.0 †	63.5 *	0.0 †	0.0 †
Limited in other activity &									
Excellent	475	209	81.0	2.3 *	4.6 *	0.0 †	12.1	0.9 *	0.4 *
Very good	771	329	78.8	2.2 *	5.8	0.0 †	13.1	1.8 *	0.2 *
Good	674	304	71.8	5.0	4.4	0.4 *	18.4	1.9 *	3.6 *
Fair	280	127	70.2	4.8 *	4.1 *	1.0 *	20.0	3.0 *	1.7 *
Poor	65	31	54.5	15.1 *	12.3 *	0.0 †	18.2 *	1.9 *	17.0 *
Unknown	6 *	3	70.4 *	0.0 †	0.0 †	0.0 †	29.6 *	0.0 †	0.0 †
Not limited in activity &									
Excellent	29,581	12,873	81.3	1.1	1.4	0.3	16.0	0.2	0.4
Very good	19,286	8,514	79.5	1.6	1.8	0.3	16.9	0.4	1.0
Good	12,445	5,514	71.1	2.3	1.9	0.6	24.1	0.5	1.4
Fair	1,978	899	62.8	6.3	2.7	1.3 *	26.9	1.0 *	4.7
Poor	224	98	42.1	9.0 *	6.9 *	0.0 †	42.0	3.8 *	6.9 *
Unknown	171	79	62.4	5.0 *	1.3 *	0.0 †	31.4	0.0 †	5.0 *
All Women	77,197	35,961	74.7	7.5	2.2	0.4	15.3	1.7	6.4
Health Status									
Excellent	26,682	12,219	81.5	3.9	1.5	0.4	12.8	0.4	2.8
Very good	23,226	10,763	79.3	5.2	1.7	0.3	13.4	0.9	4.2
Good	19,336	9,110	69.6	9.1	2.2	0.4	18.7	1.4	8.1
Fair	5,886	2,847	55.4	18.4	4.8	0.6	20.7	5.9	17.1
Poor	1,800	895	31.9	37.2	9.6	0.2 *	21.0	18.5	33.5
Unknown	268	127	68.5	8.5 *	0.7 *	0.0 †	22.2	0.8 *	8.5 *
Major Activity									
Unable to perform major activity	2,971	1,452	39.5	32.7	10.2	0.5 *	17.1	18.7	29.8
Limited in amount/kind of major activity	4,104	1,954	62.5	13.4	5.7	0.5	17.8	5.9	12.8
Limited in other activity	3,258	1,552	65.2	14.6	3.2	0.1 *	16.9	4.1	12.8
Not limited in activity	66,865	31,003	77.4	5.6	1.6	0.4	14.9	0.5	4.6
Work Activity									
Unable to work	4,113	2,011	38.8	32.9	10.6	0.4 *	17.4	17.9	30.3
Limited in amount/kind of work	3,486	1,643	69.0	8.7	3.4	0.5 *	18.4	2.3	8.4
Limited in other activity	2,733	1,304	68.3	12.4	3.0	0.4 *	16.0	4.3	10.5
Not limited in activity	66,865	31,003	77.4	5.6	1.6	0.4	14.9	0.5	4.6
Basic Life Activities									
Needs help in self care (ADL)	415	198	23.7	40.2	20.1	0.8 *	15.3	25.4	40.8
Needs help in routine activities (IADL)	1,397	682	41.3	32.8	11.7	0.4 *	13.8	18.9	31.7
Not limited in basic life activities	75,385	35,081	75.6	6.8	1.9	0.4	15.3	1.2	5.7

TABLE D. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only (%)	Public Only (%)	Private and Public (%)	Undefined Plans Only (%)	Not Insured (%)	Medicare (%)	Medicaid (%)
Work Activity & Basic Life Activities									
Unable to work &									
Needs help in self care (ADL)	349	169	19.8	41.9	22.1	0.3 *	15.9	28.1	43.8
Needs help in routine activities (IADL)	981	482	34.1	38.0	13.9	0.3 *	13.8	24.1	36.2
Not limited in basic life activities	2,784	1,360	42.8	30.0	8.0	0.4 *	18.8	14.4	26.5
Limited in amount/kind of work &									
Needs help in self care (ADL)	36 *	15	47.1 *	24.0 *	17.1 *	0.0 †	11.8 *	9.8 *	24.0 *
Needs help in routine activities (IADL)	237	115	65.0	14.4	5.2 *	0.0 †	15.4	4.4 *	15.1
Not limited in basic life activities	3,213	1,513	69.5	8.2	3.1	0.5 *	18.7	2.0	7.8
Limited in other activity &									
Needs help in self care (ADL)	30	14	40.7 *	39.6 *	0.0 †	6.9 *	12.7 *	12.9 *	26.7 *
Needs help in routine activities (IADL)	171	80	50.8	27.5	8.7 *	1.2 *	11.8 *	8.1 *	28.3
Not limited in basic life activities	2,532	1,210	69.8	11.0	2.7	0.3 *	16.3	3.9	9.1
Not limited in activity &									
Needs help in self care (ADL)	0 *	0	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	9 *	5	28.1 *	57.9 *	0.0 †	0.0 †	14.0 *	36.7 *	45.7 *
Not limited in basic life activities	66,856	30,998	77.5	5.6	1.6	0.4	14.9	0.5	4.6
Work Activity & Health Status									
Unable to work &									
Excellent	156	73	50.9	16.3	7.4 *	0.0 †	25.4	10.9 *	18.2
Very good	342	160	52.1	23.1	8.3	0.0 †	16.5	19.0	17.5
Good	1,026	485	47.2	24.8	8.6	0.0 †	19.4	13.6	22.8
Fair	1,358	679	39.3	34.0	11.6	0.9 *	14.2	17.2	32.3
Poor	1,215	606	25.7	43.3	12.3	0.4 *	18.4	22.9	39.4
Unknown	16 *	8	40.7 *	46.3 *	0.0 †	0.0 †	13.0 *	13.6 *	32.7 *
Limited in amount/kind of work &									
Excellent	337	156	73.1	8.2 *	2.8 *	0.0 †	15.9	2.5 *	8.5
Very good	767	349	77.2	6.2	1.8 *	0.3 *	14.4	1.4 *	4.7
Good	1,291	605	68.6	8.3	4.2	0.7 *	18.3	2.0	8.3
Fair	893	433	64.1	11.4	3.6	0.5 *	20.4	2.8 *	11.4
Poor	186	93	54.7	11.2 *	4.4 *	0.0 †	29.7	4.8 *	9.4 *
Unknown	12 *	7	49.8 *	0.0 †	16.3 *	0.0 †	33.9 *	0.0 †	16.3 *
Limited in other activity &									
Excellent	349	160	76.8	6.1 *	2.5 *	0.7 *	13.9	0.5 *	4.3 *
Very good	670	317	77.7	6.9	4.2 *	0.3 *	11.0	2.1 *	7.0
Good	963	463	72.5	10.4	1.6 *	0.2 *	15.2	2.1 *	9.3
Fair	569	273	54.3	17.7	3.9 *	0.7 *	23.4	7.8	14.7
Poor	170	86	36.2	40.6	5.0 *	0.0 †	18.3	21.4	30.3
Unknown	12 *	5	65.5 *	0.0 †	0.0 †	0.0 †	34.5 *	0.0 †	0.0 †
Not limited in activity &									
Excellent	25,839	11,830	81.9	3.7	1.4	0.4	12.6	0.4	2.6
Very good	21,447	9,937	79.9	4.9	1.6	0.3	13.4	0.5	3.8
Good	16,056	7,557	71.0	8.0	1.7	0.4	18.8	0.5	7.1
Fair	3,065	1,462	60.2	13.7	2.4	0.5 *	23.2	1.4 *	12.5
Poor	229	110	43.0	24.0	2.8 *	0.0 †	30.2	3.9 *	24.0
Unknown	228	107	71.6	6.8 *	0.0 †	0.0 †	21.6	0.0 †	6.8 *

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE A-2.
* Estimate has low statistical reliability (relative standard error > 30).
† Estimate is exactly 0 or standard error is indeterminate.

Table E. Type of Health Insurance Coverage Among Adults Aged 18 to 64 by Level of Disability: United States, 1989

Severity of disability	Population (1,000s)	With private only (%)	SE (%)	With public (%)	SE (%)	Uninsured (%)	SE (%)
Needs assistance in basic life activities							
Self-care (ADL)	780	21.2#	2.4	65.5#	3.2	12.1‡	2.0
Routine care (IADL)	2,210	35.6#	1.8	50.7#	2.0	13.5§	1.1
Does not need assistance in basic life activities and is							
Unable to work	5,656	37.8#	1.2	42.1#	1.3	19.1§	0.8
Limited amount/kind work	6,362	67.0#	1.0	12.4#	0.8	20.2#	0.9
Limited other than work	4,763	72.6#	1.1	11.1#	0.9	16.0	0.9
Not limited in activity	130,538	77.7	0.4	5.3	0.1	16.6	0.3
Total	150,309	74.7	0.4	8.2	0.1	16.7	0.3

Source: 1989 National Health Interview Survey (author's tabulations from public use tapes)
‡ Significantly different from people not limited in activity, $p<.05$ (two-tailed t-test)
§ Significantly different from people not limited in activity, $p<.01$ (two-tailed t-test)
# Significantly different from people not limited in activity, $p<.001$ (two-tailed t-test)

TABLE F. Distribution of Adults Aged 18 to 64 on Medicare by Employment and Work Disability Status: United States, 1989

	Total		Not Employed		Employed	
Work activity	(1,000s)	(%)	(1,000s)	(%)	(1,000s)	(%)
Unable to work	1,908	67.6	1,856	76.4	51	13.0
Limited in amount/kind work	189	6.7	98	4.0	91	23.2
Limited in activities other than work	158	5.6	139	5.7	19	4.8
Not limited in activity	569	20.2	337	13.9	232	59.0
Total	2,822	100.0	2,430	100.0	392	100.0

Source: 1989 National Health Interview Survey (author's tabulations from public use tapes)

activity (Table F). Thus, about a quarter of those on Medicare say they are not limited at all in work.

Medicaid covers 26.8% of people unable to work and drops to 6.7% for those limited in the amount or kind of work they can do. Among people with limitations less severe than being unable to work at a job or business, Medicaid covers more people than Medicare. For example, among people limited in the amount or kind of work they can do, Medicaid covers 6.7% versus Medicare at 2.8% ($t=6.69$, $p<.001$). This reflects the broader eligibility for Medicaid based on characteristics other than disability.[8]

This surprising result does not depend on whether respondents answer for themselves or other respondents answer for them. Furthermore, of the 392,000 employed people estimated to be on Medicare, about 59% state they are not limited in any activity, a result that is even more surprising. One reason may be that respondents on SSDI who have mental conditions may be more likely to interpret the activity limitation questions in terms of physical activity. In 1989, 21% of SSDI beneficiaries had mental, psychoneurotic, or personality disorders (Social Security Administration, 1991, Table 6.C5). Although many people with mental conditions also have physical health problems, those without physical limitations might answer they are not limited in activity. Perhaps a more likely explanation for the large number of non-limited people on Medicare is classification error either on activity limitation or type of insurance. Some people may think they are on Medicare when they in fact have Medicaid. Perhaps some dependents who are not limited in activity erroneously think they are covered by Medicare.

Of people who need assistance in self-care activities, 35.8% are covered by Medicare—the highest rate of

[8] Of people aged 18 to 64, 11.1% on AFDC are unable to work, whereas 66.8% on SSI are unable to work. Those on SSI comprise 30.3% and those on AFDC 40.2% of people on Medicaid. About 31.8% of those classified as having Medicaid are neither SSI or AFDC recipients.

Medicare coverage of any population—and 36.9% by Medicaid—a higher fraction than even among the poor (27.4%, Table B). About 10.8% of people who need assistance in self-care activities have both Medicare and Medicaid, and 5.7% have military coverage (Table 2). In fact, the majority of people needing assistance in self-care activities—65.5%—are covered by some kind of federal government insurance (Figure 2). Furthermore, a high degree of overlapping private and public coverage occurs among this population. In fact, it is as common to have both private and public insurance (24.7%) as it is to have private insurance alone (21.2%). About 17.4% have private insurance and Medicare while 7.2% have private insurance and Medicaid (Table 2). Medicare thus accounts for most of the overlap of private with public insurance, with half of working-age people with self-care limitations who are on Medicare also covered by private insurance. Conversely, about 40% of those with private insurance have Medicare coverage. About 20% of people with self-care limitations who are on Medicaid have private insurance. Around 50% of those with military coverage have private insurance, and about 30% of people on Medicare have Medicaid coverage.

People who need assistance in routine activities (IADL), such as shopping or getting about the community, are as likely as those who need assistance in self care activities to be covered by private insurance (Table D and Figure 2), but they have a lower rate of public coverage (50.7 versus 65.5%, t=4.09, p<.001). Some 13.8% have both private and public coverage. Among people who are not limited in basic life activities (ADL and IADL), those who are unable to work are much more likely than people with less severe limitations to have public coverage and much less likely to have private insurance (Figure 2).

Public coverage continues to expand with greater severity of disability (Table E and Figure 2). However, for people with more severe limitations in basic life activities, private insurance coverage remains about the same as for those who are unable to work—close to 50%. This pattern is observed for both men and women (Figure 3).[9] It would appear that even among people with a disability, a major reason for not having private health insurance is separation from the labor force. Private insurance does not decrease further for people with limitations more severe than inability to work, but public insurance increases. One reason that the fraction with private insurance coverage does not decline with increasing severity of disability is that people with disabilities may desire to retain private insurance coverage.

Marriage and disability

As noted earlier, married people are more likely than unmarried people to have private insurance. The reverse occurs for public insurance, though not to the same degree, leaving unmarried people more likely to be uninsured. Figure 4 shows how insurance coverage varies by level of work disability for married and unmarried people. Private insurance declines with increasing severity of work disability far less for married people than for unmarried people. Being enrolled under a spouse's plan protects against losing insurance in the eventuality of a disability. Public insurance, on the other hand, increases with greater severity of disability more for unmarried than married people, especially among those unable to work because of a health problem or impairment. Of people unable to work, public insurance covers 61.1% of those who aren't married, compared to 37.7% of those who are married. The net result is that married and unmarried people who are unable to work are equally likely to be uninsured. For groups with less severe limitations, the rate of uninsurance is about twice as high for unmarried as for married people (e.g., among people limited in the kind or amount of work they can do, 27.2% of unmarried people are uninsured versus 15.6% of married people, t=6.11, p<.001).

Married people are slightly more likely than unmarried people to be employed (76.4% versus 73.4%, t=6.64, p<.001). Marriage increases the probability of having employer-provided coverage (76.0% versus 55.5%, t=41.8, p<.001) more than it increases the probability of working, since married individuals can obtain coverage from a spouse's employer if they are not employed or if they do not receive insurance from their own employer.

Of men who have insurance provided by an employer, there is no difference in the percentage who have it in their own name whether married or not. But married men have a higher rate of private insurance coverage than unmarried men. Married men have a higher labor force participation rate than unmarried men (89.0% versus 76.9%, t=20.7, p<.001), and this accounts for some of the higher rate of private coverage. Married men may be more inclined to seek jobs that provide private insurance, thereby increasing the likelihood vis-a-vis women of having coverage in their own name. If so, women may also be more free to accept jobs that don't provide health insurance. Women who are unable to work at a job or business, may not have worked enough years to qualify for SSDI. For such women, if they are married, spousal coverage may be their only option.

Of people covered by an employer-provided insurance plan, the fraction who have coverage in their own name is 60.5% for married people compared to 71.7% for unmarried people (t=17.2, p<.001). Married women are less likely to have employer-provided insurance in their own name than unmarried women (Table G). In fact, among married women unable to work

[9] Of people with ADL limitations, the lower rate of uninsurance for men is not significantly different from women.

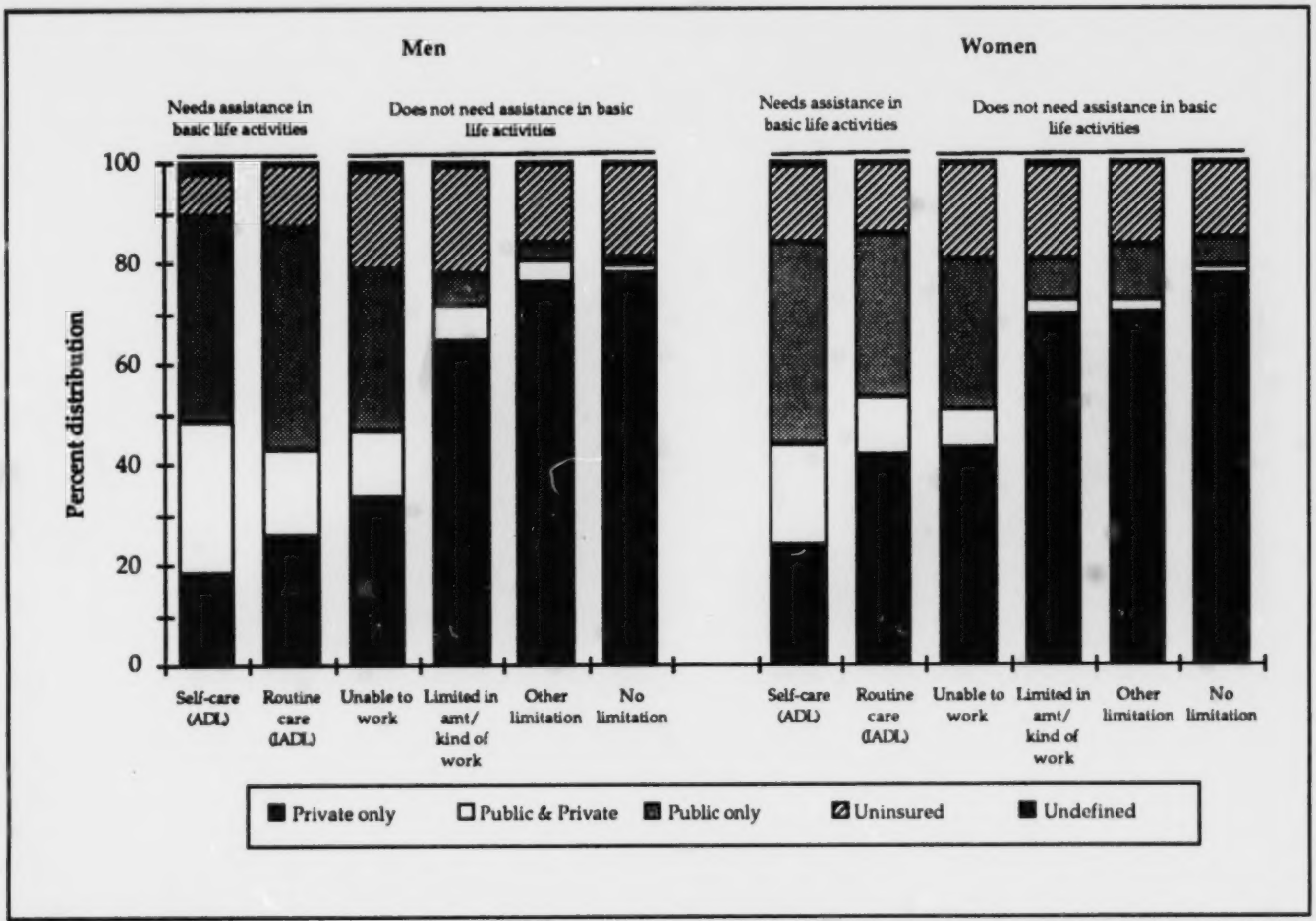

Figure 3. Percent distribution of type of health insurance coverage among men and women aged 18 to 64, by disability status: United States, 1989

at a job or business, of the 55.9% who have employer-provided private coverage, only 23.6% have it in their own name.

Thus, marriage is associated with higher rates of employer-provided coverage for men and women. However, for women, and especially women with more severe disabilities, their coverage most often is provided through a spouse. Married men are about as likely as unmarried men to have coverage in their own name, regardless of disability level. Unmarried women are especially more likely to have public insurance than married women, especially women who are unable to work (62.3% versus 27.2%, t=12.6, p<.001). Spousal coverage enables married women to make up for their lower rate of public coverage.

Married men are somewhat less likely than unmarried men to have public coverage (Table H). For men, marital status generally does not confer greater eligibility for public insurance. The net result of all of this is that unmarried men are twice as likely as married men to be uninsured. Unmarried men have a lower rate of public coverage than unmarried women, especially those with minor or no disabilities.

TABLE G. Percent of People Aged 18 to 64 with Employer-Provided Insurance And Percent With Such Coverage in Their Own Name, by Gender, Work Disability, and Marital Status: United States, 1989

	Unmarried				Married			
	(A) Percent With Insurance Plan Provided by Employer (%)	SE (%)	(B) Percent of (A) With Plan in Own Name (%)	SE (%)	(C) Percent With Insurance Plan Provided by Employer (%)	SE (%)	(D) Percent of (C) With Plan in Own Name (%)	SE (%)
Men								
Unable to work	19.7	2.0	66.0	5.4	48.2#	1.9	64.7	2.7
Limited in amount/kind work	45.4	2.9	81.3	3.4	72.5#	1.8	79.7	1.9
Limited in other activities	56.0	3.7	79.3	4.0	80.4#	1.9	80.7	2.1
Not limited in activity	57.9	0.7	69.8	0.8	78.3#	0.4	82.6#	0.4
Total	55.1	0.6	70.2	0.8	76.6#	0.4	82.0#	0.4
Women								
Unable to work	20.6	1.8	60.2	4.7	55.9#	2.0	23.6#	2.3
Limited in amount/kind work	50.1	2.6	77.2	3.0	73.4#	1.9	34.9#	2.3
Limited in other activities	51.6	2.8	79.5	3.2	68.9#	2.2	32.8#	2.7
Not limited in activity	59.4	0.6	72.9	0.7	76.6#	0.4	40.3#	0.5
Total	55.8	0.6	73.1	0.7	75.3#	0.4	39.4#	0.5

Source: 1989 National Health Interview Survey (author's tabulations from public use tapes)
Significantly different from unmarried people, $p<.001$ (two-tailed t-test)

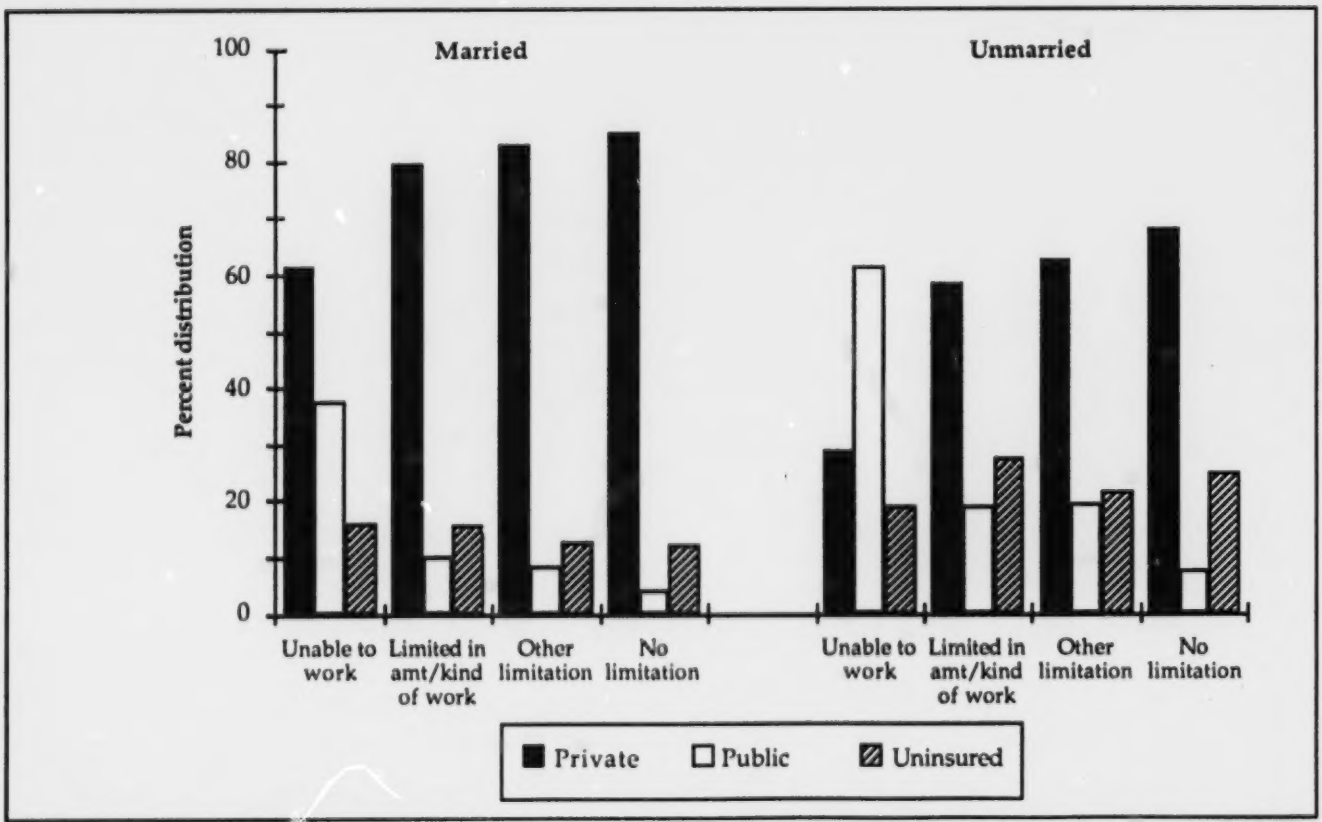

Figure 4. Percent distribution of type of health insurance coverage among adults aged 18 to 64 by work disability status, by gender: United States, 1989.

Table H. Percent of People Aged 18 to 64 with Public Insurance And Percent Uninsured, by Gender, Work Disability, and Marital Status: United States, 1989

	Unmarried				Married			
	Percent With Public Insurance (%)	SE (%)	Percent Uninsured (%)	SE (%)	Percent With Public Insurance (%)	SE (%)	Percent Uninsured (%)	SE (%)
Men								
Unable to work	59.5	2.5	21.2	2.1	47.3#	1.9	14.9§	1.4
Limited in amount/kind work	19.3	2.3	31.6	2.7	12.3§	1.3	16.4#	1.5
Limited in other activities	9.2	2.1	27.7	3.3	8.7	1.4	10.4#	1.5
Not limited in activity	3.2	0.2	29.4	0.6	3.4	0.2	12.8#	0.3
Total	7.5	0.3	29.0	0.6	6.1#	0.2	13.0#	0.3
Women								
Unable to work	62.3	2.1	17.4	1.7	27.2#	1.8	17.3	1.5
Limited in amount/kind work	19.0	2.0	23.9	2.2	7.6#	1.1	14.7#	1.5
Limited in other activities	25.1	2.4	17.9	2.2	8.3#	1.3	14.6	1.7
Not limited in activity	21.0	0.5	14.8	0.5	5.0#	0.2	11.8#	0.3
Total	16.1	0.4	20.7	0.5	6.2#	0.2	12.3#	0.3

Source: 1989 National Health Interview Survey (author's tabulations from public use tapes)
§ Significantly different from unmarried people, $p<.01$ (two-tailed t-test).
# Significantly different from unmarried people, $p<.001$ (two-tailed t-test).

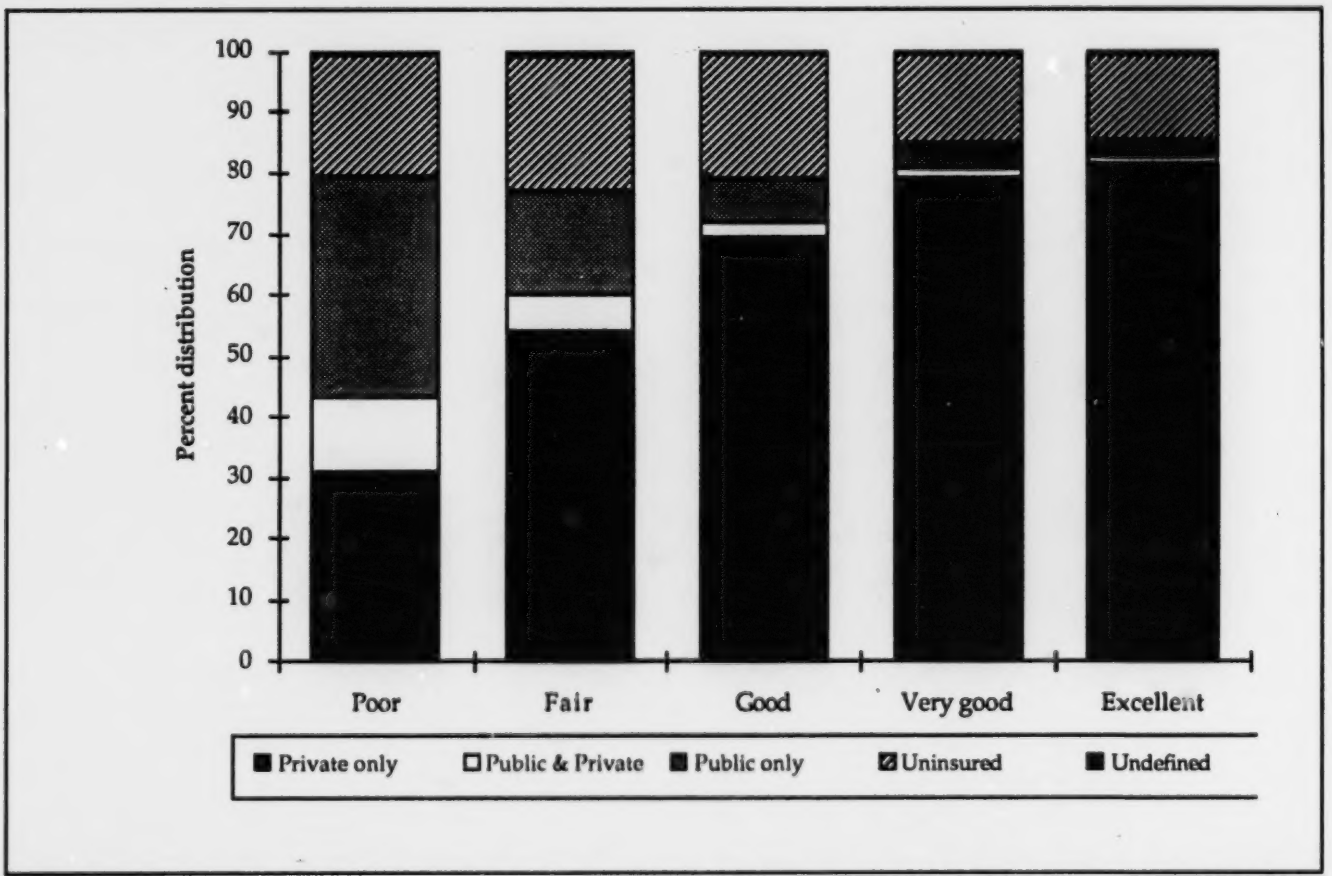

Figure 5. Percent distribution of type of health insurance coverage among adults aged 18 to 64 by respondent-assessed health status: United States, 1989.

Poor health

Although disability and poor health are correlated, they are not synonymous. For example, among people unable to work, 63.0% rate their health as fair or poor, 23.5% good, and 13.0% very good to excellent. Some people with severely disabling physical impairments generally rate their health as excellent or very good, including people with developmental disabilities, certain impairments associated with injury (Ries & Brown, 1991), or people with stabilized chronic illness conditions (such as cancer in remission). Others with active chronic illness, such as severe circulatory disease, often rate their health as poor.

Private insurance coverage declines continuously as health is worse (Figure 5). Unlike inability to work, there is no significant threshold at which private insurance coverage drops off. Private insurance coverage declines and public insurance increases with worse health but public insurance expands faster than private insurance declines, and the overlap of public insurance with private insurance increases. Medicare and Medicaid coverage rates are highest among people in fair to poor health (Table D).

Of people unable to work, those who are in excellent health have a significantly lower rate of public coverage than those in poor health (27.8% versus 59.2%, t=6.84, p<.001), but are not significantly more likely to be uninsured (21.3% versus 16.8%). There is a tendency for the rate of uninsurance to increase with poorer health among people who are limited in activities other than work or who are not limited in activity. Among the latter, those in poor health are significantly more likely than those in excellent health to be uninsured (36.1% versus 14.4%, t=5.27, p<.001), though they are a small group (about 453,000). Men with minor or no activity limitation who are in poor health may find it difficult to secure private insurance due to their health condition but also cannot qualify for public insurance programs. Among people with minor or no limitations, as health is worse, Medicaid coverage increases for women, but not for men.

Gender and disability

Of people who need assistance in self care, men are as likely as women to have private insurance and as likely as women to be uninsured. However, men who need assistance in self care are more likely than women to be covered by Medicare (47.7% versus 25.4%, t=4.14, p<.001). Around 22.4% of men who need assistance in self care have Medicare and private insurance, higher than those who have private insurance alone (18.3%). About 13.0% of women who need assistance in self care have both Medicare and private insurance. Regardless of gender, around half of people on Medicare have private insurance. About 60% of men with military coverage have private insurance as do 40% of women. The rate of Medicaid coverage is not different by gender.

Of people who need assistance in routine activities, men are more likely than women to have public insurance alone (44.0% versus 32.8%, t=3.25, p<.01) or in combination with private insurance (17.5% versus 11.7%, t=2.38, p<.05). Women needing assistance in routine activities are more likely than men to have private insurance alone (41.3% versus 25.6%, t=4.71, p<.001) but are as likely as men to be uninsured. Of people who need assistance in routine activities, men are more likely than women to have military coverage (9.7% vs. 2.0%, t=4.51, p<.001) and are twice as likely as women to have Medicare (37.1% versus 18.9%, t=6.13, p<.001). The rate of Medicaid coverage does not differ by gender.

Men who are unable to work are more likely to have Medicare coverage than women (30.3% versus 17.9%, t=7.62, p<.001) and are more likely to have military coverage (9.9% vs. 2.7%, t=7.2, p<.001). Women unable to work are more likely than men to have Medicaid coverage (30.3% versus 23.1%, t=4.42, p<.001). This reflects women's historically lower labor force participation than men. Since SSDI is based on years of work experience, women's eligibility for SSDI is less than men's. So disabled women depend more on Medicaid than Medicare, but at the cost that they must be poor in order to receive it.

Of people who are limited in activities other than work, women have a much higher rate of Medicaid coverage than men (10.5% versus 3.3%, t=7.69). But of people with no limitations, women are much more likely than men to have Medicaid coverage (4.6% versus 1.0%, t=16.1, p<.001).

Regression analysis

To determine the extent to which the above observations may be sensitive to the interrelationships among variables, logistic regression models are estimated examining the relationship of disability (defined on a six-category scale exactly as in Table E) with private insurance coverage, public insurance coverage, and uninsurance (defined as Y=1 if the individual has that particular form of coverage, else Y=0). The logistic model describes how disability and other variables affect the likelihood (more exactly the likelihood of the log of the odds ratio) of having one of these forms of insurance. Control variables include age, gender, race, Hispanic origin, education, marital status, health status, family income to poverty ratio, and employment.

Among adults, private insurance is associated with age, being female, being white, being non-Hispanic, education, marriage, good health, affluence, work, and absence of disability. Public insurance is correlated with being black or races other than white, low education, being unmarried, poor health, poverty, not working, and disability. Age and Hispanic origin have no impact on public insurance. Being uninsured is associated with being male, being black or races other than white, being Hispanic, low education, being unmarried, good to poor

TABLE I. Logistic Regression Models of the Likelihood of Private, Public, and No Insurance Coverage Among Adults Aged 18 to 64: United States, 1989

	Private Insurance			*Public Insurance*			*No Insurance*		
	Beta	χ^2	χ^2 [1]	Beta	χ^2	χ^2 [1]	Beta	χ^2	χ^2 [1]
Intercept	0.533	14.41	---	-3.576	321.35	---	-0.517	13.54	---
Disability									
Needs help in									
Self care (ADL)	-0.549	16.43 #	17.15 #	2.254	303.40 #	254.72 #	-1.019	32.75 #	22.65 #
Routine activities (IADL)	-0.437	26.62 #	19.98 #	1.674	403.27 #	399.87 #	-0.832	61.74 #	53.57 #
Does not need help in basic life activities and is									
Unable to work	-0.513	80.38 #	63.52 #	1.215	419.53 #	361.16 #	-0.385	35.74 #	27.53 #
Limited in amount/kind of work	-0.193	13.92 #	11.83 #	0.584	75.68 #	54.25 #	0.116	4.68 ‡	4.06 ‡
Limited in other activities	-0.096	2.36	2.05	0.417	26.83 #	26.21 #	-0.023	0.12	0.10
(Not limited in activity)									
Age									
Age in years	-0.006	0.99	0.47	-0.001	0.02	0.01	-0.016	6.74 §	3.63
Age in years squared	3.85E-04	26.30 #	12.35 #	1.30E-04	1.62	1.00	-8.04E-05	1.04	0.55
Gender									
Men (Women)	-0.282	152.89 #	115.40 #	-0.019	0.29	0.20	0.363	239.15 #	212.32 #
Race									
Black (White)	-0.343	120.68 #	65.65 #	0.477	120.00 #	73.22 #	0.090	7.63 §	4.87 ‡
Other (White)	-0.556	103.61 #	22.79 #	0.381	23.27 #	7.25 §	0.401	52.14 #	14.09 #
Hispanic Ethnicity									
Hispanic (Non-Hispanic)	-0.613	304.26 #	142.69 #	0.054	0.96	0.35	0.581	281.94 #	114.03 #
Education									
Years of education	0.024	2.90	1.90	0.000	0.00	0.00	0.018	1.75	0.99
Years of education squared	0.006	73.02 #	48.09 #	-0.002	6.01 ‡	4.25 ‡	-0.007	113.60 #	73.63 #
Marital Status									
Married	0.573	348.41 #	166.39 #	-0.315	42.33 #	16.40 #	-0.483	240.57 #	124.21 #
Previously married	-0.389	93.96 #	66.20 #	0.306	28.10 #	20.14 #	0.158	14.77 #	9.70 §
(Never married)									
Health Status									
Very good (Excellent)	0.031	1.24	0.56	0.140	9.06 §	6.59 ‡	-0.054	3.62	1.78
Good (Excellent)	-0.262	80.13 #	50.59 #	0.258	30.35 #	20.03 #	0.205	46.73 #	30.47 #
Fair (Excellent)	-0.351	58.37 #	37.56 #	0.404	43.50 #	32.59 #	0.171	12.59 #	8.10 §
Poor (Excellent)	-0.653	76.05 #	54.52 #	0.662	66.93 #	70.16 #	0.197	5.77 ‡	4.29 ‡
Unknown (Excellent)	-0.488	8.22 §	4.80 ‡	-0.029	0.01	0.01	0.448	6.82 §	2.76
Family Income to Poverty Ratio									
1.75 to under 2.00 (Above 2.00)	-0.427	160.31 #	91.86 #	-0.001	0.00	0.00	0.444	154.78 #	88.73 #
1.50 to under 1.75 (Above 2.00)	-0.753	399.79 #	195.75 #	0.355	30.86 #	18.11 #	0.758	367.36 #	191.99 #
1.25 to under 1.50 (Above 2.00)	-1.215	816.71 #	410.45 #	0.432	39.89 #	39.20 #	1.166	697.08 #	301.89 #
1.00 to under 1.25 (Above 2.00)	-1.506	1125.24 #	426.39 #	0.661	94.62 #	62.53 #	1.398	942.68 #	435.21 #
0.50 to under 1.00 (Above 2.00)	-1.885	2241.92 #	950.52 #	1.269	600.35 #	340.41 #	1.259	1000.72 #	389.46 #
Less than 0.50 (Above 2.00)	-1.798	1147.32 #	234.25 #	1.519	599.24 #	271.98 #	0.996	374.02 #	121.01 #
Employment Status									
Unemployed	-1.176	484.00 #	403.72 #	0.929	160.70 #	108.10 #	0.850	270.41 #	195.04 #
Not in labor force	-0.621	481.97 #	380.67 #	1.384	1282.77 #	849.50 #	-0.044	2.04	1.54
(Employed)									
Sample size		68,211			68,211			68,211	
Goodness of fit χ^2 (Hosmer)		37.24			86.70			153.84	
Significance level with 8 degrees of freedom		p<0.001			p<0.001			p<0.001	

1. χ^2 corrected for complex sample design (using RTILOGIT).
‡ p<0.05.
§ p<0.01.
# p<0.001.

health, poverty, and being unemployed. Note that being out of the labor force has a strong negative impact on private insurance and a strong positive impact on public insurance. Public insurance, all things being equal, does compensate for the diminished access of people who are out of the labor force to private insurance, and being out of the labor force has no impact on being uninsured. Hispanic origin, however, has a strong negative impact on private insurance, no impact on public insurance, and thus, a strong positive impact on being uninsured. Public insurance, all things being equal, does not compensate for the diminished access of Hispanic people to private insurance.

Greater severity of disability lowers the likelihood of private insurance coverage, increases the likelihood of public insurance, and decreases the likelihood of uninsurance (Table I). In all three models, disability has an impact independent of labor force status. The likelihood of having private insurance is much lower for people unable to work than people without limitation, but the likelihood does not decrease further with more severe limitations in IADL and ADL. However, the likelihood of public insurance rises continuously with greater severity of disability. Thus, logistic regression confirms the interpretation that with greater severity of disability, public insurance expands more than private insurance contracts. As we have seen, this pattern also results in people with ADL and IADL limitations being more likely to have overlapping private and public coverage.

1.2 Children

Health insurance coverage rates for children are shown in Tables 3 and J. Children are somewhat less likely than adults to have private insurance (71.2% versus 77.2%, t=6.71, p<.001), and are much more likely than adults to be covered by public insurance, predominantly by Medicaid (11.8% versus 4.4%, t=13.7, p<.001).[10] No significant difference in the percent uninsured is observed between children and adults.

Children aged 5-17 are more likely than those aged 0 to 4 to have private insurance (73.1% versus 66.7%, t=5.0, p<.001), in part be due to the fact that older children have older parents who are more likely to have private insurance. Young children are more likely to have Medicaid (14.9% versus 10.5%, t=4.2, p<.001), as expected since Medicaid is targeted toward young children.

Black children are more likely to be uninsured than white children (19.5% versus 14.9%, t=3.77, p<.001), as are children of other races (20.2% versus 14.9%, t=2.39, p<.05). Hispanic children have a low rate of private insurance (46.6%) and are two and a half times more likely than non-Hispanic children to be uninsured (34.1% versus 13.2%, t=7.66, p<.001).

The percent of children uninsured increases with greater poverty. Of children in families with incomes under 125% of the federal poverty level, about a third are uninsured. Medicaid covers 60.7% of children in families with incomes under half the poverty threshold, yet 28.4% are uninsured. Extremely poor children are much less likely than extremely poor adults to have private insurance (13.0% versus 29.5%, t=5.40, p<.001), and thus face even greater obstacles in obtaining access to private insurance coverage.

No differences are observed in patterns of coverage for boys and girls.

Disability and poor health

Disability is less common among children than adults. About 5.4% of children are limited in activity compared to 13.1% of adults aged 18 to 64. Children with activity limitation are as likely as children without limitation to be uninsured (about 15.8%, Table C), but are less likely to have private insurance alone and are more likely to have public insurance alone or both public and private insurance. Nondisabled children are 4 times as likely as nondisabled adults to be covered by Medicaid (11.1% versus 2.8%, t=16.3, p<.001) which reflects the more expansive targeting of Medicaid to poor children than to poor adults. Children with activity limitation are 64% more likely than adults with activity limitation to be covered by Medicaid (24.2% versus 14.8%, t=5.61, p<.001).

Among children aged 5 to 17 who need assistance in self care because of a health problem or impairment, 49.9% are covered by Medicaid and 9.7% are uninsured (Table K). However, the rate of uninsurance is not significantly different from children who do not need assistance in self care (or are under age 5). About 31.5% of children who are unable to perform their major activity are covered by Medicaid, decreasing to 25.9% of children limited in amount or kind of major activity, and to 17.8% of those limited in other activities. Thus, Medicaid coverage is correlated with severity of children's disability.

The rate of uninsurance among children limited in major activity is not significantly different from children without limitation. However, children limited in activities other than major are somewhat less likely than children without limitation to be uninsured (11.4% versus 15.8%, t=2.57, p<.05). In this group, children have a high rate of private insurance coverage, and they benefit from public coverage as well. Unlike adults, among children,

[10] Children are eligible for Medicare only if they have end-stage renal disease (children of parents on Medicare are not covered). Yet, 0.2% of children—141,000 total—are estimated to be covered by Medicare. Since only 58,000 people under age 65 were enrolled in 1989 under the ESRD program (Social Security Administration, 1991), the estimate cannot reflect the true number of children covered under Medicare. Adults are obviously confused about their children's health insurance coverage, perhaps mistaking Medicare for Medicaid.

TABLE J. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance				Not Insured %	Medicare %	Medicaid %
			Private Only %	Public Only %	Private and Public %	Undefined Plans Only %			
Total	64,005	31,524	69.6	12.4	1.7	0.6	15.8	0.2	11.8
Age									
0-4 years	18,769	9,146	65.2	15.9	1.5	0.7	16.7	0.2 *	14.9
5-17 years	45,236	22,378	71.3	11.0	1.7	0.5	15.4	0.2	10.5
Race									
White	51,612	24,701	74.3	8.9	1.4	0.5	14.9	0.1 *	8.2
Black	9,959	5,680	48.2	28.6	2.9	0.8	19.5	0.5 *	29.0
Other	2,434	1,143	55.9	20.2	2.0 *	1.7 *	20.2	0.9 *	18.9
Ethnicity									
Hispanic	7,948	3,744	45.2	18.6	1.4	0.7	34.1	0.4 *	18.1
Non-Hispanic	56,057	27,780	73.0	11.5	1.7	0.4	13.2	0.2	10.9
Family Income									
Under $5,000	2,859	1,515	11.2	59.6	3.4	0.9 *	24.8	1.0 *	62.5
$5,000-$6,999	2,116	1,079	10.7	51.5	5.7 *	0.9 *	31.3	0.4 *	55.4
$7,000-$9,999	3,273	1,741	17.4	46.7	3.7	0.8 *	31.4	0.3 *	48.9
$10,000-$14,999	6,162	3,112	37.0	21.7	1.8	1.0	38.4	0.2 *	21.3
$15,000-$19,999	6,917	3,439	58.1	11.7	2.0	1.0	27.2	0.2 *	10.7
$20,000-$24,999	5,131	2,542	73.2	8.6	1.2	0.8 *	16.2	0.2 *	5.9
$25,000-$34,999	12,896	6,259	83.4	4.2	0.8	0.5	11.1	0.1 *	2.6
$35,000-$49,999	13,394	6,496	89.5	2.8	1.4	0.3 *	6.1	0.1 *	1.7
$50,000 or more	11,256	5,341	94.3	1.2	0.9	0.1 *	3.5	0.2 *	0.7
Poverty Level									
Under 0.50	4,433	2,321	9.3	57.7	3.6	0.9 *	28.4	0.9 *	60.7
0.50 to under 1.00	7,434	3,887	22.9	36.6	3.1	0.9	36.5	0.1 *	38.1
1.00 to under 1.25	4,476	2,307	50.4	16.3	2.0	0.6 *	30.7	0.4 *	15.3
1.25 to under 1.50	4,757	2,369	62.2	9.7	1.6	1.1 *	25.5	0.2 *	8.7
1.50 to under 1.75	8,594	4,204	77.8	7.0	1.3	0.3 *	13.6	0.4 *	5.1
1.75 to under 2.00	11,737	5,692	85.4	3.3	1.2	0.5 *	9.7	0.2 *	2.0
2.00 and above	22,574	10,744	90.7	2.2	1.1	0.4	5.6	0.0	1.1
Age and Poverty Level									
0-4 years and									
Under 0.50	1,553	812	7.3	64.4	1.9 *	1.5 *	24.8	0.4 *	65.3
0.50 to under 1.00	2,348	1,213	19.6	41.2	2.5	1.4 *	35.3	0.1 *	42.4
1.00 to under 1.25	1,348	675	42.7	22.0	2.9 *	1.2 *	31.2	0.4 *	20.2
1.25 to under 1.50	1,309	648	55.7	14.3	2.3	0.6 *	27.1	0.3 *	12.8
1.50 to under 1.75	2,205	1,061	74.8	7.7	1.4	0.4 *	15.8	0.6 *	5.6
1.75 to under 2.00	3,157	1,529	80.6	5.4	1.3	0.5 *	12.2	0.2 *	3.6
2.00 and above	6,849	3,208	90.1	2.9	0.7	0.3 *	6.0	0.0	1.6
5-17 years and									
Under 0.50	2,880	1,509	10.4	54.2	4.6	0.6 *	30.3	1.2 *	58.2
0.50 to under 1.00	5,087	2,674	24.5	34.4	3.3	0.6 *	37.1	0.1 *	36.1
1.00 to under 1.25	3,128	1,632	53.6	13.8	1.6 *	0.4 *	30.5	0.3 *	13.2
1.25 to under 1.50	3,448	1,721	64.7	8.0	1.3	1.2 *	24.8	0.2 *	7.2
1.50 to under 1.75	6,388	3,143	78.9	6.8	1.2	0.3 *	12.8	0.3 *	5.0
1.75 to under 2.00	8,580	4,163	87.2	2.5	1.1	0.5 *	8.7	0.2 *	1.5
2.00 and above	15,725	7,536	90.9	1.9	1.4	0.4	5.4	0.0	1.0

TABLE J. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance				Not Insured %	Medicare %	Medicaid %
			Private Only %	Public Only %	Private and Public %	Undefined Plans Only %			
All Boys	32,753	16,040	69.6	12.1	1.8	0.6	15.9	0.2	11.6
Age									
0-4 years	9,607	4,607	65.6	15.4	1.7	0.7	16.7	0.2 *	14.5
5-17 years	23,146	11,433	71.3	10.8	1.9	0.5	15.6	0.2	10.4
Race									
White	26,471	12,626	74.6	8.6	1.5	0.5	14.8	0.1 *	7.9
Black	5,052	2,838	47.1	28.4	3.6	0.7 *	20.2	0.5 *	29.5
Other	1,230	576	53.2	21.3	1.9 *	2.4 *	21.2	0.8 *	18.7
Ethnicity									
Hispanic	3,958	1,874	45.5	18.1	1.5	0.8	34.4	0.4 *	17.6
Non-Hispanic	28,795	14,166	72.9	11.3	1.9	0.4	13.3	0.2	10.8
Family Income									
Under $5,000	1,465	762	10.4	60.1	3.7	1.0 *	24.8	1.2 *	63.6
$5,000-$6,999	948	495	8.8	52.0	5.9 *	1.6 *	31.7	0.4 *	55.7
$7,000-$9,999	1,668	879	16.1	45.3	4.2	0.9 *	33.5	0.1 *	48.2
$10,000-$14,999	3,126	1,557	37.9	21.2	2.0	0.7 *	38.2	0.2 *	20.7
$15,000-$19,999	3,648	1,807	57.6	11.9	2.1	1.0 *	27.4	0.4 *	11.2
$20,000-$24,999	2,527	1,256	74.1	8.3	1.3 *	0.9 *	15.3	0.1 *	5.7
$25,000-$34,999	6,710	3,239	82.5	4.4	1.0	0.6 *	11.6	0.1 *	2.7
$35,000-$49,999	6,845	3,307	89.3	2.5	1.8	0.2 *	6.1	0.1 *	1.6
$50,000 or more	5,816	2,738	94.2	1.1	1.1	0.1 *	3.5	0.1 *	0.8
Poverty Level									
Under 0.50	2,191	1,136	9.1	57.4	3.5	1.3 *	28.7	1.0 *	60.6
0.50 to under 1.00	3,722	1,945	22.9	36.4	3.4	0.7 *	36.6	0.1 *	38.1
1.00 to under 1.25	2,218	1,134	49.4	16.3	1.7 *	0.7 *	31.9	0.4 *	15.4
1.25 to under 1.50	2,544	1,264	62.8	10.1	1.7	0.7 *	24.7	0.2 *	9.5
1.50 to under 1.75	4,365	2,124	76.6	7.5	1.5	0.2 *	14.2	0.4 *	5.5
1.75 to under 2.00	6,098	2,941	85.1	3.1	1.4	0.7 *	9.8	0.1 *	1.9
2.00 and above	11,615	5,496	90.5	1.9	1.5	0.4	5.7	0.1 *	1.0
Age and Poverty Level									
0-4 years and									
Under 0.50	796	417	7.6	62.2	1.8 *	2.0 *	26.3	0.8 *	63.6
0.50 to under 1.00	1,176	608	21.1	40.3	3.0	1.3 *	34.4	0.1 *	42.4
1.00 to under 1.25	647	320	44.0	20.7	2.1 *	1.4 *	31.8	0.6 *	18.0
1.25 to under 1.50	735	354	57.4	14.2	2.4 *	0.0 †	26.0	0.3 *	12.7
1.50 to under 1.75	1,115	526	73.8	9.0	1.4 *	0.2 *	15.6	0.4 *	6.7
1.75 to under 2.00	1,654	781	80.1	4.9	1.8	0.7 *	12.4	0.2 *	3.5
2.00 and above	3,484	1,601	90.0	2.4	1.0 *	0.4 *	6.1	0.0 †	1.4
5-17 years and									
Under 0.50	1,395	719	9.9	54.6	4.5	0.9 *	30.1	1.1 *	58.8
0.50 to under 1.00	2,546	1,337	23.7	34.5	3.5	0.5 *	37.7	0.1 *	36.0
1.00 to under 1.25	1,571	814	51.6	14.5	1.6 *	0.4 *	32.0	0.2 *	14.3
1.25 to under 1.50	1,809	910	65.0	8.4	1.5 *	1.0 *	24.2	0.2 *	8.2
1.50 to under 1.75	3,250	1,598	77.6	7.0	1.5	0.2 *	13.7	0.4 *	5.1
1.75 to under 2.00	4,444	2,160	86.9	2.4	1.2	0.6 *	8.9	0.0	1.2
2.00 and above	8,131	3,695	90.7	1.7	1.7	0.4	5.4	0.1 *	0.9

TABLE J. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance				Not Insured %	Medicare %	Medicaid %
			Private Only %	Public Only %	Private and Public %	Undefined Plans Only %			
All Girls	31,252	15,484	69.5	12.8	1.4	0.5	15.7	0.2	12.0
Age									
0-4 years	9,162	4,539	64.9	16.5	1.2	0.6	16.7	0.2 *	15.3
5-17 years	22,090	10,945	71.5	11.2	1.5	0.5	15.3	0.2	10.7
Race									
White	25,141	12,075	74.0	9.3	1.3	0.5	15.0	0.1 *	8.5
Black	4,907	2,842	49.3	28.9	2.2	0.8	18.7	0.5 *	28.4
Other	1,204	567	58.7	19.0	2.1 *	0.9 *	19.3	1.0 *	19.2
Ethnicity									
Hispanic	3,990	1,870	45.0	19.1	1.3	0.6 *	33.8	0.4 *	18.6
Non-Hispanic	27,262	13,614	73.1	11.8	1.5	0.3	13.1	0.2	11.1
Family Income									
Under $5,000	1,394	753	12.1	59.1	3.2	0.8 *	24.8	0.7 *	61.4
$5,000-$6,999	1,168	584	12.2	51.0	5.5 *	0.3 *	30.9	0.3 *	55.2
$7,000-$9,999	1,606	862	18.7	48.0	3.3	0.7 *	29.2	0.5 *	49.7
$10,000-$14,999	3,036	1,555	36.1	22.3	1.7	1.2	38.6	0.1 *	21.9
$15,000-$19,999	3,269	1,632	58.7	11.5	1.9	1.0 *	27.0	0.1 *	10.2
$20,000-$24,999	2,604	1,286	72.2	8.8	1.2 *	0.7 *	17.1	0.3 *	6.2
$25,000-$34,999	6,187	3,020	84.3	4.0	0.6	0.4	10.7	0.2 *	2.5
$35,000-$49,999	6,549	3,189	89.6	3.0	1.1	0.3 *	6.0	0.1 *	1.8
$50,000 or more	5,440	2,603	94.5	1.3	0.7 *	0.1 *	3.4	0.3 *	0.5 *
Poverty Level									
Under 0.50	2,243	1,185	9.6	58.1	3.8	0.5 *	28.0	0.9 *	60.9
0.50 to under 1.00	3,712	1,942	23.0	36.8	2.8	1.0	36.4	0.1 *	38.1
1.00 to under 1.25	2,258	1,173	51.3	16.2	2.3 *	0.6 *	29.6	0.4 *	15.2
1.25 to under 1.50	2,212	1,105	61.6	9.3	1.3 *	1.5	26.3	0.2 *	7.9
1.50 to under 1.75	4,229	2,080	79.1	6.5	1.1	0.4 *	13.0	0.4 *	4.8
1.75 to under 2.00	5,639	2,751	85.8	3.5	1.0	0.3 *	9.5	0.3 *	2.3
2.00 and above	10,959	5,248	90.9	2.4	0.8	0.4	5.5	0.0	1.2
Age and Poverty Level									
0-4 years and									
Under 0.50	757	395	7.0	66.7	2.1 *	1.1 *	23.2	0.0 †	67.1
0.50 to under 1.00	1,171	605	18.2	42.2	2.0	1.5 *	36.2	0.1 *	42.5
1.00 to under 1.25	701	355	41.4	23.1	3.7 *	1.0 *	30.7	0.3 *	22.2
1.25 to under 1.50	574	294	53.5	14.3	2.1 *	1.4 *	28.6	0.3 *	13.0
1.50 to under 1.75	1,090	535	75.8	6.3	1.4 *	0.5 *	16.0	0.8 *	4.5
1.75 to under 2.00	1,503	748	81.1	6.0	0.6 *	0.2 *	12.1	0.2 *	3.8
2.00 and above	3,365	1,607	90.3	3.4	0.3 *	0.2 *	5.8	0.1 *	1.8
5-17 years &									
Under 0.50	1,485	790	11.0	53.8	4.6 *	0.2 *	30.4	1.3 *	57.7
0.50 to under 1.00	2,541	1,337	25.2	34.3	3.2	0.8 *	36.5	0.1 *	36.1
1.00 to under 1.25	1,557	818	55.7	13.1	1.7 *	0.4 *	29.0	0.4 *	12.0
1.25 to under 1.50	1,638	811	64.4	7.5	1.1 *	1.5 *	25.5	0.1 *	6.1
1.50 to under 1.75	3,139	1,545	80.2	6.6	0.9 *	0.4 *	11.9	0.3 *	4.9
1.75 to under 2.00	4,136	2,003	87.4	2.7	1.1	0.3 *	8.5	0.3 *	1.7
2.00 and above	7,595	3,641	91.2	2.0	1.0	0.4 *	5.4	0.0 †	1.0

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE A-3.
* Estimate has low statistical reliability (relative standard error > 30%).
† Estimate is exactly 0 or standard error is indeterminate.

TABLE K. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only %	Public Only %	Private and Public %	Undefined Plans Only %	Not Insured %	Medicare %	Medicaid %
Total	64,005	31,524	69.6	12.4	1.7	0.6	15.8	0.2	11.8
Age									
0-4 years	18,769	9,146	65.2	15.9	1.5	0.7	16.7	0.2 *	14.9
5-17 years	45,236	22,378	71.3	11.0	1.7	0.5	15.4	0.2	10.5
Health Status									
Excellent	33,747	16,494	75.9	8.8	1.4	0.5	13.5	0.2	7.8
Very good	17,052	8,406	69.4	12.4	1.5	0.6	16.0	0.3 *	11.9
Good	10,902	5,495	54.0	20.9	2.5	0.8	21.9	0.3 *	21.0
Fair	1,472	727	47.7	29.7	2.5	0.7 *	19.5	0.6 *	30.5
Poor	190	92	32.2	35.5	1.0 *	0.0 †	31.3	0.0 †	36.6
Unknown	643	310	67.0	13.8	1.2 *	0.2 *	17.8	0.3 *	13.2
Major Activity									
Unable to perform major activity	346	171	49.5	28.3	4.4 *	0.7 *	17.1	0.6 *	31.5
Limited in amount/kind of major activity	2,097	1,032	54.3	23.8	4.0	0.2 *	17.8	0.8 *	25.9
Limited in other activity	994	497	68.1	17.5	2.4 *	0.6 *	11.4	0.2 *	17.8
Not limited in activity	60,567	29,824	70.2	11.9	1.5	0.6	15.8	0.2	11.1
Basic Life Activities									
Needs help in self care (ADL)-ages 5-17	194	89	38.3	43.7	8.3 *	0.0 †	9.7 *	1.5 *	49.9
Not limited in basic life activities	63,811	31,435	69.7	12.3	1.6	0.6	15.8	0.2	11.7
All Boys	32,753	16,040	69.6	12.1	1.8	0.6	15.9	0.2	11.6
Age									
0-4 years	9,607	4,607	65.6	15.4	1.7	0.7	16.7	0.2 *	14.5
5-17 years	23,146	11,433	71.3	10.8	1.9	0.5	15.6	0.2	10.4
Health Status									
Excellent	17,509	8,528	75.8	8.7	1.6	0.5	13.4	0.1 *	7.7
Very good	8,576	4,204	69.1	12.2	1.8	0.6	16.3	0.3 *	11.7
Good	5,524	2,759	55.1	19.6	2.8	0.6	21.9	0.2 *	20.3
Fair	740	362	42.6	32.0	3.1 *	1.2 *	21.2	0.2 *	33.3
Poor	91	44	28.2	35.3	2.2 *	0.0 †	34.3	0.0 †	37.5
Unknown	313	143	64.5	15.2	0.0 †	0.0 †	20.2	0.0 †	13.3
Major Activity									
Unable to perform major activity	201	101	47.9	28.3	3.9 *	1.2 *	18.7	0.0 †	31.1
Limited in amount/kind of major activity	1,319	641	55.4	21.9	4.5	0.1 *	18.0	0.8 *	24.4
Limited in other activity	580	289	65.8	18.5	3.0 *	0.6 *	12.1	0.3 *	19.3
Not limited in activity	30,653	15,009	70.4	11.5	1.7	0.6	15.8	0.2	10.8
Basic Life Activities									
Needs help in self care (ADL)-ages 5-17	130	56	28.4	49.9	10.2 *	0.0 †	11.6 *	0.0 †	57.0
Not limited in basic life activities	32,623	15,984	69.7	12.0	1.8	0.6	15.9	0.2	11.4

TABLE K. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Insurance: Private Only %	Public Only %	Private and Public %	Undefined Plans Only %	Not Insured %	Medicare %	Medicaid %
All Girls	31,252	15,484	69.5	12.8	1.4	0.5	15.7	0.2	12.0
Age									
0-4 years	9,162	4,539	64.9	16.5	1.2	0.6	16.7	0.2 *	15.3
5-17 years	22,090	10,945	71.5	11.2	1.5	0.5	15.3	0.2	10.7
Health Status									
Excellent	16,238	7,966	75.9	8.9	1.2	0.4	13.6	0.2	7.9
Very good	8,475	4,202	69.8	12.7	1.3	0.5	15.7	0.3 *	12.1
Good	5,377	2,736	52.9	22.2	2.2	0.9	21.8	0.3 *	21.8
Fair	732	365	52.8	27.4	1.9 *	0.2 *	17.8	0.9 *	27.6
Poor	99	48	35.8	35.7	0.0 †	0.0 †	28.5	0.0 †	35.7
Unknown	330	167	69.3	12.5	2.4 *	0.4 *	15.5	0.6 *	13.1
Major Activity									
Unable to perform major activity	146	70	51.7	28.3	5.2 *	0.0 †	14.8	1.3 *	32.1
Limited in amount/kind of major activity	778	391	52.3	26.9	3.0 *	0.3 *	17.5	0.7 *	28.6
Limited in other activity	415	208	71.2	16.3	1.5 *	0.5 *	10.5	0.0 †	15.8
Not limited in activity	29,914	14,815	70.0	12.3	1.4	0.5	15.8	0.2	11.5
Basic Life Activities									
Needs help in self care (ADL)-ages 5-17	64	33	58.5	31.2	4.5 *	0.0 †	5.8 *	4.5 *	35.7
Not limited in basic life activities	31,188	15,451	69.6	12.7	1.4	0.5	15.8	0.2	12.0

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE A-4.
* Estimate has low statistical reliability (relative standard error > 30).
† Estimate is exactly 0 or standard error is indeterminate.

no consistent pattern is observed in the rate of uninsurance with severity of disability.

It can be questioned whether the activity limitation measure adequately captures disability in children. Its consistency with the Federal definition of developmental disabilities has not been demonstrated, and alternative measures need to be explored (Levine, Zitter, & Ingram, 1990). Respondent-assessed health status provides an alternative measure of children whose health is vulnerable.

The proportion of children with private coverage declines consistently with worsening health, from 77.3% of children in excellent health to 33.2% of those in poor health (Table K). Among children, labor force participation is irrelevant, and one might suspect the statistics convey that insurers reject coverage for children who are ill. However, an alternative explanation is that the availability of public coverage gives parents the option of dropping covered children's private insurance, for which they may have to pay premiums. Unlike Medicare, Medicaid does not require copayments[11] and pays for prescription drugs,[12] so there may be less need to retain private coverage as a supplement. Particularly for children, the availability of public coverage may influence private coverage, an issue worthy of further study.

About 288,388 children are covered by SSI due to blindness and other impairments, including those in institutions (Social Security Administration, 1990, Table 9.B8). The 1989 NHIS yields an estimate of 457,000 noninstitutionalized children on SSI. Children on SSI are typically severely disabled, but the NHIS indicates that only 12.6% of children on SSI are limited in self care, and 58.5% are not limited in activity. This indicates that either the SSI question for children is not answered reliably, with SSI possibly being confused with other welfare programs, or that the activity limitation question is not very reliable, or both.[13]

1.3 TRENDS

Estimates of insurance coverage for 1984 and 1989 were compared by age, race, and disability status (Table L). The rate of uninsurance among children and adults both increased slightly over this period by 5-6%.[14] Private insurance declined slightly by 0.5 percentage points overall and declined especially for adults aged 18 to 44. Medicare and Medicaid coverage increased slightly overall and for most groups, but not enough to compensate for the decline in private insurance among adults aged 18 to 44. The rate of uninsurance increased significantly for children aged 5 to 17. A decline in private insurance was compensated by an increase in public coverage (mainly Medicaid), but there was a substantial decline in military and other plans. The increase in uninsurance among children should not be weighed highly in terms of policy given its sensitivity to change in the residual plan category.

Although the rate of uninsurance increased for adults in all categories of limitation in activity, only among the population not limited in activity was the increase significant. Among children limited in amount or kind of major activity, the rate of private coverage declined significantly, leading to a significant increase in the rate of uninsurance. Given the short time period of this comparison, it is best not to read too much into these findings.

These findings presage more significant changes that have occurred after 1989 as noted by Himmelstein, Woolhandler, and Wolfe (1992), specifically that the rate of private insurance has declined but has been offset by an expansion of Medicaid for poor children that occurred in 1990 (U.S. Bureau of the Census, 1991a; U.S. Bureau of the Census, 1991b; U.S. Bureau of the Census, 1992).

In summary, 4.1 million people under age 65 with disabilities are uninsured. Over half a million are children with disabilities. Approximately 1.5 million adults with severe disabilities—those who need assistance in ADL or IADL or who are unable to work—are uninsured, out of 3.5 million uninsured adults with some level of disability. The 4.1 million uninsured children and adults with disabilities comprise a potentially high risk group that may not receive needed health services. Since data from 1984 reveal similar statistics, we infer that people with disabilities have experienced uninsurance as an ongoing problem.

Compared to independent statistics on program participation, this study reveals some inconsistencies that affect the measurement of the uninsured and require greater attention. Medicaid is substantially underreported in the NHIS. Furthermore, it is apparent that some adults are confused about Medicare coverage: a higher than expected 13.9% of adults on Medicare say they work, and of those who do work, the majority state they are not limited in any activities. Some parents

[11] In general, state governments cannot charge copayments exceeding $3.00 per service category per month (Systemetrics/McGraw-Hill, 1990).

[12] In 1989, only Alaska failed to provide prescription drugs under Medicaid. Fifteen states offered prescribed drugs to the categorically needy only, the rest covered both categorically and medically needy populations (Ruther et al., 1990).

[13] Because the tabulations did not indicate a significant impact of disability on uninsurance of children, regression analysis was not undertaken for this group. Furthermore, since the health insurance status of children is largely a function of parental characteristics, considerable merging of data files would be necessary to engage in a meaningful analysis for children.

[14] Newacheck, McManus, and Gephart (1992) found a 10% increase in the rate of uninsurance among children aged 10 through 18.

TABLE L. Type of Health Insurance Coverage Among Children and Adults, by Age, Race, and Disability: United States, 1984 and 1989

	1984						1989					
	Population (1,000s)	Private[1] Only (%)	Medicare and/or Medicaid[1] Only (%)	Private with Other[2] Coverage (%)	Military and Other[3] Plans Only (%)	Not Insured (%)	Population (1,000s)	Private[1] Only (%)	Medicare and/or Medicaid[1] Only (%)	Private with Other[2] Coverage (%)	Military and Other[3] Plans Only (%)	Not Insured (%)
Adults	142,581	75.2	4.2	2.9	2.0	15.7	150,309	74.7	4.5 ‡	2.5 #	1.6 #	16.7 #
Age												
18-24 years	28,045	65.5	5.2	1.3	2.0	26.0	25,401	62.7 #	5.5	1.2	2.3	28.3 §
25-44 years	70,256	78.2	4.2	1.5	1.3	14.8	78,794	77.2 ‡	4.1	1.3	1.1	16.3 #
45-64 years	44,280	76.6	3.9	6.0	3.0	10.5	46,114	77.0	4.7 §	5.2 §	2.0 #	11.1
Race												
White	122,660	77.7	3.1	2.8	1.9	14.5	127,549	77.3	3.3	2.5 ‡	1.4 #	15.5 #
Black	16,082	58.3	12.9	3.2	2.6	23.0	17,477	58.2	12.2	2.6	2.7	24.3
Other	3,839	65.2	5.6	2.7	4.5	22.0	5,283	65.5	6.4	2.5	2.9 ‡	22.7
Major Activity												
Unable to perform major activity	5,774	33.5	27.2	16.6	6.9	15.8	6,772	34.1	29.5	13.6 ‡	5.4	17.4
Limited in amount/kind of major activity	7,861	63.0	9.4	7.0	3.5	17.1	7,498	62.7	9.1	6.5	2.3 ‡	19.4
Limited in other activity	4,969	70.0	8.2	4.6	2.0	15.2	5,490	69.1	9.3	3.9	1.6	16.1
Not limited in activity	123,976	78.1	2.7	1.9	1.7	15.6	130,549	77.7	2.7	1.6 §	1.4 §	16.6 #
Children	62,592	70.3	10.1	1.6	3.0	15.0	64,005	69.6	10.7	1.7	2.2 #	15.8 ‡
Age												
0-4 years	18,074	65.2	13.3	1.6	3.3	16.6	18,769	65.2	13.8	1.5	2.8	16.7
5-17 years	44,518	72.4	8.8	1.6	2.8	14.4	45,236	71.3	9.5	1.7	2.0 #	15.4 ‡
Race												
White	51,267	75.0	6.6	1.3	2.7	14.4	51,612	74.3	7.2	1.4	2.2 §	14.9
Black	9,497	47.6	28.1	3.4	3.3	17.6	9,959	48.2	26.9	2.9	2.5	19.5
Other	1,829	56.0	15.8	2.1	6.7	19.4	2,434	55.9	18.4	2.0	3.4 ‡	20.2
Major Activity												
Unable to perform major activity	262	46.9	23.1	6.7	7.6	15.7	346	49.5	26.5	4.4	2.5	17.1
Limited in amount/kind of major activity	1,985	60.4	20.6	3.2	3.2	12.6	2,097	54.3 ‡	22.6	4.0	1.4	17.8 ‡
Limited in other activity	925	69.7	9.0	3.0	3.7	14.6	994	68.1	16.3 ‡	2.4	1.8	11.4
Not limited in activity	59,420	70.8	9.7	1.5	2.9	15.1	60,567	70.2	10.2	1.5	2.3 #	15.8

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Source: National Health Interview Survey (author's tabulations from public use tapes).

[1] Excludes military.

[2] Includes combinations with military coverage.

[3] Excludes private, Medicare, and Medicaid.

‡ $p<0.05$
§ $p<0.01$
# $p<0.001$

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appear to be confused about their children's SSI coverage or by how disability is measured in children. Measures of public insurance coverage and participation in the programs that confer such coverage need to be further examined and improved. Though there is substantial evidence of content validity, there is evidence that people who should have public coverage do not report it, while others who should not have such coverage do. This has implications for counting the uninsured and for the quality of public program data.

2 Disability, Insurance, and Health Services Use

In this part, estimates of the annual number of physician contacts per person, hospital discharges per 100 people, and average length of stay per hospital discharge are compared between people with insurance and those without insurance by disability, health status, and other characteristics. Logistic regression models are estimated to determine the impact of insurance on utilization by level of disability, controlling for health status and other sociodemographic characteristics.

2.1 Physician contacts

2.1.1 Adults

Physician contacts are estimated using the recalled number of contacts occurring during the two weeks prior to the time of interview. Having insurance facilitates access to physician care among adults (Table 5). On average, adults have 38% fewer physician contacts if they are uninsured (3.4 versus 5.5 contacts, t=7.16, p<.001). Compared to people with private insurance or no insurance, people with Medicare, Medicaid, or military coverage have more physician contacts, but this comparison is biased because people with these types of coverage are more likely to have a disability and generally worse health.

As expected, physician contacts increase with severity of disability. People who need assistance in self care have 28.9 physician contacts a year, and those who need assistance in routine care have 23.3 physician contacts a year. In both these groups no significant differences are observed between those insured and not insured (significance levels of insured versus uninsured comparisons are shown in Table 5). The small sample size of these populations is compounded by the rate of uninsurance being less than 15%, and differences between the insured and uninsured are hard to detect.

Among people unable to work, those with insurance have 20.0 annual physician contacts, 32% higher than the number of physician contacts of those without insurance. Regardless of type of insurance, physician contacts for those unable to work are higher for the insured than the uninsured but are significantly higher only for those with private insurance. Of people limited in amount or kind of work, those with insurance have 14 percent higher physician contacts than those without insurance, but this difference is not significant. However, those with Medicaid have significantly more contacts than those who are uninsured. Among people limited in activities other than work, those with insurance have 9.0 annual physician contacts, 80% greater than the number of physician contacts for those without insurance; this difference is highly statistically significant. Last, among people not limited in activity, physician contacts are about 90% greater for those with insurance than those without insurance. Thus, having insurance is significantly associated with more physician contacts among people with disabilities.

Regardless of health status, the number of physician contacts is very consistent by type of insurance and, overall, people with insurance have 42% to 104% more physician contacts than those without insurance.

Men have fewer contacts with doctors than women (3.9 versus 6.4, t=17.7, p<.001), and this generally holds regardless of level of disability or health status. Men have 40% fewer physician contacts if they are uninsured than if they are insured, while women have 34% fewer contacts if they lack insurance coverage. For uninsured men and women both, physician contacts are fewer than for insured people for most levels of activity limitation and health status levels, though the effect of insurance (and its statistical significance) is more variable than for the sample as a whole.

Regression analysis

Uninsured people may differ from those with insurance in terms of their health and other sociodemographic characteristics even within categories of activity limitation. For example, those with insurance may have more income, be better educated, be more likely to perceive themselves to be healthier, and so forth, than similarly disabled people who lack insurance. It is necessary to test statistically whether the observed differences in utilization by disability status can be explained by differences in health and sociodemographic characteristics. We focus on the effect of insurance within work disability categories; crude comparisons within these categories have already indicated a significant impact of insurance. A series of logistic regression models is estimated (1) with the three categories of work disability and insurance specified and (2) with sociodemographic, health status, and income variables added in sequential steps (Table M).

The dependent variable is defined as Y=1 if a person has at least one physician contact during the two weeks preceding the interview; otherwise Y=0. A logistic model is used to describe how disability and other variables affect the likelihood (more exactly the likelihood of the log of the odds ratio) of having a physician contact. In model A, in which work disability categories and type of insurance are specified, the insurance effect is large and significant. In model B, the insurance effect is allowed to

TABLE M. Logistic Regression Models of the Likelihood of Physician Contact Among Adults Aged 18 to 64: United States, 1989

	Model A		*Model B*		*Model C*		*Model D*		*Model E*		*Model F*		
	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	χ^2[1]
Intercept	-2.628	5627.24	-2.686	4234.00	-2.451	227.56	-2.789	284.91	-2.687	250.77	-2.826	300.08	---
Insurance													
Insured (Uninsured)	0.621	292.07 #	0.686	248.29 #	0.579	166.42 #	0.626	192.65 #	0.608	177.72 #	0.630	195.74 #	120.74 #
Work Disability													
Unable to work	1.521	1665.53 #	1.741	315.21 #	1.771	314.90 #	1.278	151.37 #	1.288	153.06 #	1.281	152.13 #	126.40 #
Limited in amount/kind	0.924	424.52 #	1.196	113.32 #	1.203	112.41 #	0.917	63.47 #	0.921	63.86 #	0.920	63.90 #	47.63 #
Limited in other activities	0.769	208.58 #	0.757	21.24 #	0.721	19.03 #	0.476	8.14 §	0.478	8.19 §	0.479	8.25 §	6.36 ‡
(Not limited in activity)													
Insurance and Disability Interactions													
Unable to work			-0.254	5.76 ‡	-0.152	2.00	-0.212	3.80	-0.206	3.57	-0.212	3.79	2.91
Limited in amount/kind			-0.319	6.78 §	-0.284	5.29 ‡	-0.290	5.42 ‡	-0.291	5.45 ‡	-0.290	5.41 ‡	3.73
Limited in other activities			0.015	0.01	0.059	0.12	0.080	0.21	0.080	0.21	0.078	0.19	0.15
(Uninsured and not limited)													
Age													
Age in years					-0.020	8.96 §	-0.024	13.24 #	-0.024	13.01 #	-0.023	12.11 #	10.75 §
Age in years squared					2.15E-04	7.41 §	2.22E-04	7.86 §	2.09E-04	6.93 §	2.05E-04	6.66 §	5.93 ‡
Gender													
Men (Women)					-0.566	550.62 #	-0.536	485.46 #	-0.538	487.88 #	-0.535	483.39 #	463.59 #
Race													
Black (White)					-0.106	7.64 §	-0.204	27.78 #	-0.189	23.17 #	-0.196	25.90 #	23.20 #
Other (White)					-0.218	9.81 §	-0.303	18.70 #	-0.285	16.58 #	-0.292	17.42 #	15.22 #
Hispanic Ethnicity													
Hispanic (Non-Hispanic)					-0.025	0.30	-0.078	2.87	-0.069	2.23	—	—	—
Education													
Years of education					0.016	0.92	0.012	0.49	0.012	0.48	0.019	1.34	1.13
Years of education squared					0.001	2.07	0.002	9.13 §	0.002	7.72 §	0.002	6.49 ‡	5.32 ‡
Marital Status													
Married					0.188	27.37 #	0.186	26.58 #	0.193	28.43 #	0.196	29.48 #	26.35 §
Previously married					0.242	27.16 #	0.231	24.36 #	0.235	25.25 #	0.227	23.52 #	21.62 §
(Never married)													
Health Status													
Very good (Excellent)							0.340	119.10 #	0.342	120.36 #	0.342	120.77 #	104.74 #
Good (Excellent)							0.611	338.92 #	0.616	343.52 #	0.612	342.04 #	257.52 #
Fair (Excellent)							1.001	443.42 #	1.012	448.39 #	1.000	445.00 #	385.85 #
Poor (Excellent)							1.412	421.30 #	1.426	425.04 #	1.410	420.95 #	356.65 #
Unknown (Excellent)							-0.178	0.46	-0.180	0.47	—	—	—
Family Income to Poverty Ratio													
1.75 to under 2.00 (Above 2.00)									-0.233	33.94 #	-0.212	29.50 §	25.39 #
1.50 to under 1.75 (Above 2.00)									-0.178	12.83 #	-0.155	10.22 §	7.65 §
1.25 to under 1.50 (Above 2.00)									-0.099	2.90	—	—	—
1.00 to under 1.25 (Above 2.00)									-0.064	1.06	—	—	—
0.50 to under 1.00 (Above 2.00)									-0.117	5.09 ‡	—	—	—
Less than 0.50 (Above 2.00)									-0.035	0.27	—	—	—

Sample size (for all models)	68,211
Goodness of fit χ^2 (Hosmer)-Model F	16.50
Significance level with 8 degrees of freedom	p=0.036

1. χ^2 corrected for complex sample design (using RTILOGIT).
2. Reference category is excellent and unknown health status.
3. Reference category is poverty ratio not between 1.50 to 2.00.

— Variable dropped for final model.
‡ p<0.05.
§ p<0.01.
# p<0.001.

vary by work limitation category. The coefficient for the variable "insured" in model B represents the effect of having insurance versus not having insurance *among people who are not limited in activity*. The interaction terms measure the magnitude of the insurance effect on the likelihood of having a physician contact for each category of work limitation *relative to* the effect of insurance for people not limited in activity. For people unable to work or limited in amount or kind of work, the effect of insurance is significantly diminished over the effect for people without activity limitation. This reflects the pattern observed in the data presented in Table 5 and discussed above, namely that the *relative* effect of insurance is greater among people who are not limited in activity than among people unable to work or limited in the amount or kind of work. Nevertheless, the effect of insurance is still substantial for people who are unable to work: the probability of having a physician contact in the past two weeks is .374 if insured and .280 if uninsured, a 34% change. By contrast, among people not limited in activity, the probability of having a physician contact is 0.119 if insured and 0.064 if not insured, an 86% change.

The logistic model describes the likelihood of physician contact, it does not measure the total volume of contacts. The number of contacts estimated in Table 5 reflects both the likelihood of having a physician contact and the number of contacts among those with at least one. If the probabilities obtained from model B are multiplied by 26 to estimate the annual number of contacts, people unable to work and insured would have 9.7 contacts compared to the actual estimate of 20.0 contacts. Thus, the probability accounts for half of the estimated utilization in Table 5 for people unable to work and insured. For people not limited in activity, the probability accounts for about 75% of the total number of contacts. Because the number of contacts is distributed in a narrow range within a two-week period,[15] further analysis of the volume of contacts is not undertaken. The logistic analysis describes the greater part of the variation in total contacts and the results parallel the patterns observed in the crude data for total volume.

The effect of insurance remains large and significant when sociodemographic, health status, and income variables are controlled. In model F, in which those variables are included, the likelihood of physician contact increases with age, is much lower for men (hugely significant), is lower for blacks and other races, but not for people of Hispanic origin, and increases with higher education, but is significant only when health status is controlled (compare with model C). Married and previously married people have a higher likelihood of physician contact than those never married. The likelihood of physician contact increases strongly and significantly with poorer health status, and is significantly lower for people of moderate income from 1.5 to 2 times the poverty line than those with incomes 2 or more times the poverty line. At income below 1.5 times the poverty line, people are as likely to contact a physician as are those with incomes at 2 times the poverty line and above. With simultaneous adjustment for all sociodemographic, health status, and income factors, the insurance interaction for people unable to work falls just below the .05 significance level of being different from the effect of insurance on people without activity limitation. Only for those limited in the amount or kind of work is the effect of insurance significantly less than for people without activity limitation ($p<.05$). For the final model, the Chi-square significance levels before and after adjusting for the complex sample design are shown. In general, the significance of the estimated model effects is lower when the complex sample design is taken into account. However, none of the interaction terms for insurance remains significant when the complex design is taken into account. Since the main effect of insurance stays significant, we conclude that the effect of uninsurance is the same for people with disabilities as it is for those without disabilities.

Goodness-of-fit statistics indicate that the model is of borderline fit. Using the Hosmer-Lemeshow test (Hosmer & Lemeshow, 1989), a p value greater than .05 indicates a good fit. Here $p=.04$—almost but not quite a good fit. Generally, it is difficult to predict the health care utilization of individuals well. However, the aim of this analysis is to explore competing explanations of an observed relationship rather than to find the best-fitting model of physician utilization.

The results show that people contact physicians less often when they do not have insurance. This is true for people with disabilities, since interaction terms fail to indicate a significant difference in the magnitude of the insurance effect on the likelihood of physician contacts by level of disability. People without disabilities who lack insurance may forego utilization that is more preventive or elective. The lower utilization of the uninsured with severe disabilities may mean they forego physician services that may be necessary for the maintenance of their health, potentially increasing the chance of their condition worsening or of developing secondary conditions and increasing their disability.

[15] The distribution of contacts in the past two weeks was 86.8% with none, 9.6% with one, 2.4% with two and 1.3% with more than two. A separate analysis of the probability of having a physician contact was done employing respondents' recall of contacts for the entire year prior to the interview. This model also showed significant effects of insurance and level of disability. However, the annual recall data is biased downward, yielding an estimate of 3.6 contacts for all adults aged 18 to 64. The estimate based on two-week recall is 4.9 contacts. Because of the problem of forgetting with the annual recall data, no further analysis of volume is undertaken in the present study.

2.1.2 Children

On average, uninsured children have 34% fewer physician contacts than those with insurance, a highly significant difference (significance levels are flagged in Table 6). As expected, utilization of physicians increases with the severity of disability. Children needing assistance in self care average 15.6 contacts per year, while those unable to perform their major activity average 19.8 and those limited in the amount or kind of major activity average 10.0 contacts. Small sample sizes for these categories result in high standard errors, which limit the significance of comparisons among categories according to insurance status. For children not limited in activity, a significant difference is observed according to insurance status, with uninsured children having 40% fewer contacts than insured children.

The annual number of physician contacts increases systematically with worsening health. Children without any insurance have 37% to 45% fewer physician contacts than those with insurance, according to health status. Children in poor health have similarly high contacts whether insured or not, but there are few children in this category (190,000). Except for children in poor health, children with private insurance have significantly more contacts than uninsured children regardless of health status. Children with Medicaid coverage have significantly more contacts than uninsured children but only for those whose health is excellent or very good. Children whose health is good or fair are a group of concern: the 20% who are uninsured have 40% fewer contacts than those with insurance.

Regression analysis

Logistic regression analysis shows that among children, activity limitation and insurance are significantly associated with greater likelihood of physician contacts (Table N). The effects of activity limitation and insurance remain large and significant after controlling for sociodemographic, health status, and poverty variables and after adjusting for the complex sample design (model E). No statistically significant interactions between degree of activity limitation and insurance status are observed. As for adults then, the effect of insurance on the likelihood of physician contacts does not vary by disability level when sociodemographic, health, and income variables are included.[16] Thus, we conclude that children with disabilities, as children without disabilities, have a lower likelihood of physician contacts if uninsured. In this case, the estimated model is a good fit with the data ($p>.05$).

2.2 Hospitalization

2.2.1 Adults

Estimated rates of hospital discharges per 100 people per year and average length of stay per hospital discharge are shown in Table 7. All estimates exclude hospitalization for delivery. Among all adults aged 18 to 64, those without insurance have 31% fewer hospitalizations than those with insurance (6.4 vs. 9.3 discharges per 100 people per year). Hospitalizations are significantly lower for the uninsured than the insured regardless of type of insurance coverage (significance levels are flagged in Table 7). The higher hospitalization rates of people with Medicare and Medicaid coverage is due to their greater likelihood of disability and generally worse health. When stratified by disability and health status, hospitalization rates are quite similar across insurance types. Generally, within all categories of disability and health status, uninsured people have significantly lower rates of hospitalization than the insured.

The rate of hospitalization increases with the severity of disability. Among people who need assistance in self care—with a rate of 82.2 discharges per 100 people a year—no significant difference is observed by insurance status, perhaps owing to the small sample size of this population (also the estimated rate is higher among the uninsured than the insured, which seems to be a statistical outlier). Among people who need assistance in routine activities—who average 50.9 discharges a year—the uninsured have a 37% lower hospitalization rate than the insured.

Among people unable to work, those without insurance average 31.7 annual hospitalizations per 100 people, 40% lower than the 52.9 rate of those with insurance. People limited in the amount or kind of work they can do have a 29% lower rate of hospitalization if uninsured; for those limited in activity other than work the corresponding figure is 65% lower; and for those not limited in activity, the rate is 23% lower.

Hospitalization rates increase systematically with worse health, and within all health status categories, rates for the uninsured are significantly lower than the insured.

Uninsurance reduces hospitalization rates more for women than men. If uninsured, men have 25% fewer hospitalizations and women have 37% fewer. There are fewer significant differences between insured and uninsured groups for men than women within disability

[16] Because of the small sample sizes within the three categories of activity limitation for children, the interpretation that the lack of significance of the insurance and activity limitation interaction terms indicates that the effect of insurance on physician contacts among children with disabilities is the same as its effect among all children was verified by re-estimating model E just on the population of children with activity limitations (n=1,700). A significant effect of insurance (b=0.439, $p<.01$) was found when level of disability and the same variables included in Model E were controlled. In fact, the effect of insurance among children with disabilities is identical to the effect for all children when the same exogenous variables are controlled (b=0.438, $p<.001$). Thus, the interpretation that the effect of insurance is the same for children with disabilities as for all children is upheld.

TABLE N. Logistic Regression Models of the Likelihood of Physician Contact Among Children Aged 0 to 17: United States, 1989

Variable	*Model A*		*Model B*		*Model C*		*Model D*		*Model E*		
	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	χ^2 [1]
Intercept	-2.416	2267.99	-2.009	78.22	-2.561	115.27	-2.386	92.48	-2.384	387.73	---
Insurance											
Insured (Uninsured)	0.530	98.37 #	0.435	60.76 #	0.471	69.55 #	0.431	56.01 #	0.438	58.29 #	47.12 #
Activity Limitation											
Unable to perform major activity	1.432	79.70 #	1.578	90.85 #	0.930	27.13 #	0.938	27.57 #	0.946	28.08 #	28.06 #
Limited in amount/kind	0.821	119.36 #	1.133	213.97 #	0.780	91.45 #	0.785	92.32 #	0.784	92.17 #	87.49 #
Limited in other activities	0.778	52.18 #	1.040	89.38 #	0.765	46.27 #	0.759	45.40 #	0.758	45.25 #	33.79 #
(Not limited in activity)											
Age											
Age in years			-0.268	528.03 #	-0.270	524.72 #	-0.265	500.95 #	-0.265	502.52 #	401.61 #
Age in years squared			0.011	271.44 #	0.011	266.04 #	0.011	248.64 #	0.011	250.82 #	212.22 #
Gender											
Boys (Girls)			0.067	3.84 ‡	0.082	5.57 ‡	0.083	5.70 ‡	0.083	5.75 ‡	4.32 ‡
Race											
Black (White)			-0.383	50.67 #	-0.507	85.45 #	-0.483	72.11 #	-0.505	83.50 #	44.14 #
Other (White)			-0.231	5.78 ‡	-0.336	11.99 #	-0.310	10.19 §	-0.321	11.09 #	7.35 §
Hispanic Ethnicity											
Hispanic (Non-Hispanic)			-0.171	9.48 §	-0.225	15.97 #	-0.206	13.17 #	-0.216	14.75 #	8.49 §
Family Education											
Years of education			0.061	3.36	0.072	4.36 ‡	0.080	5.21 ‡	0.071	102.40 #	73.85 #
Years of education squared			0.000	0.10	0.000	0.03	0.000	0.13	—	—	—
Health Status											
Very good (Excellent)					0.395	88.77 #	0.398	89.79 #	0.398	89.98 #	73.13 #
Good (Excellent)					0.791	268.94 #	0.804	274.56 #	0.798	272.35 #	187.00 #
Fair (Excellent)					1.254	172.01 #	1.279	176.95 #	1.266	174.95 #	166.18 #
Poor (Excellent)					2.301	102.12 #	2.329	104.65 #	2.306	103.08 #	71.40 #
Unknown (Excellent)					0.336	3.83	0.339	3.88 ‡	0.338	3.86 ‡	2.23
Family Income to Poverty Ratio											
1.75 to under 2.00 (Above 2.00)							-0.153	9.85 §	-0.135	8.07 §	5.92 ‡
1.50 to under 1.75 (Above 2.00)							-0.344	33.65 #	-0.320	30.89 #	30.69 #
1.25 to under 1.50 (Above 2.00)							-0.261	12.16 #	-0.233	10.19 §	5.78 ‡
1.00 to under 1.25 (Above 2.00)							-0.160	4.38 ‡	-0.129	3.02	2.37
0.50 to under 1.00 (Above 2.00)							-0.258	14.08 #	-0.222	11.62 #	9.24 §
Less than 0.50 (Above 2.00)							-0.133	2.59	—	—	—

Sample size (for all models)	31,524
Goodness of fit χ^2 (Hosmer)-Model E	13.09
Significance level with 8 degrees of freedom	p=0.109

1. χ^2 corrected for complex sample design (using RTILOGIT).

— Variable dropped for final model.

‡ $p<0.05$.

§ $p<0.01$.

# $p<0.001$.

levels. For men with work limitation, the hospitalization rate is not significantly lower for the uninsured, although it is significantly lower for uninsured men limited in activities other than work and for uninsured men without activity limitation. Men who are unable to work and are uninsured have a significantly lower hospitalization rate than those with private insurance.

Hospitalization rates are lower for uninsured women regardless of level of work disability. Contrasting uninsured with insured women, rates of hospitalization are 59% lower if unable to work, 53% lower if limited in amount or kind of work, 64% lower if limited in other activities, and 23% lower if not limited. These results are highly significant. Women with disabilities who are uninsured receive much less hospital care than those with insurance and less than men with disabilities who are uninsured (e.g., of those unable to work, men have 43.3 discharges per 100 uninsured versus 20.9 discharges per 100 uninsured women, t=2.87, p<.01).

Average length of stay does not differ between the working age insured and uninsured. Standard errors of these estimates are quite low (less than 9% for the uninsured), so the sample size appears large enough to discriminate reasonably well. Unlike rates of hospital discharges, no systematic differences in average length of stay by level of disability are observed, for men and women together or separately. Thus, while the uninsured have fewer hospitalizations than the insured, on average they stay as long in the hospital as the insured.

Regression analysis

The uninsured may differ from the insured on factors disposing toward hospitalization even within disability levels. To test whether the lower rates of hospital discharge of the uninsured are sensitive to differences in health status and other factors, a series of logistic regression models are estimated adding sociodemographic, health status, and income variables in separate steps (Table O). The dependent variable is defined as 1 if an individual had one or more hospital discharge during the 6 months preceding the interview. The independent variables of interest are level of work disability and insurance, controlling for other variables. In model A, the insurance effect is assumed to be constant across work limitation categories. The effect of insurance is large and significant, as is the effect of the level of work limitation contrasted with people without limitation. In model B, the insurance effect is allowed to vary by work limitation category. The interaction of insurance with disability is significantly higher among people limited in activities other than work. Among people unable to work, the insurance interaction falls short of being significant. For those with limitation in the amount or kind of work, the effect is the same as for people without activity limitation. This reflects the same patterns observed in the data presented in Table 7 and discussed above.

The effect of insurance remains significant when sociodemographic, health status, and income variables are controlled (model F). The final column in Table O shows the Chi-square significance levels of each variable after adjusting for the complex sample design. Only the insurance interaction for people limited in activities other than work is significant, indicating a higher effect of insurance on people without activity limitation.

The likelihood of hospitalization varies nonlinearly with age. People of races other than white or black have significantly lower likelihood of hospitalization. Married and previously married people have a higher likelihood of hospitalization. With poorer health status, the likelihood increases systematically. People with incomes less than half the poverty level have a higher likelihood of hospitalization than people with incomes twice the poverty line. Despite the greater effect of uninsurance on women (Table 7), gender does not influence the likelihood of discharge.

Based on the final model, it is concluded that uninsurance is associated with lower likelihood of hospitalization for people with disabilities.

To address the observation that the impact of uninsurance is greater for women with disabilities (Table 7), separate logistic regression models of the likelihood of hospitalization are estimated by gender. These results indicate that the effect of insurance is greater among women (beta=0.631, p<.001) than men (beta=0.244, p<.01), even when sociodemographic, health, and poverty variables are controlled. No significant disability and insurance interactions are observed for men or women. Thus, men and women with disabilities are less likely to be hospitalized if uninsured but the impact of uninsurance is greater for women than for men.

2.2.2 Children

Estimated rates of hospital discharges per 100 children per year and average length of stay per hospital discharge are shown in Table 8. Among children, those without insurance have 11% fewer hospitalizations than those with insurance (4.1 vs. 4.6 discharges per 100 people), a difference that is not statistically significant. Rates of hospitalization are significantly higher for children on Medicaid than children with private insurance or no insurance. This is mainly accounted for by higher rates of hospitalization among children under 5 who are on Medicaid. Children under 5 have a rate of hospitalization 2.4 times as high as children 5 years and older. When stratified by health status, discharge rates are more comparable across insurance types and few significant differences are observed.

Hospitalization increases systematically with the severity of children's disability, as measured by activity limitation. However, the estimated hospitalization rate for children needing assistance in self care has a high

TABLE O. Logistic Regression Models of the Likelihood of Hospitalization in Past 6 Months Among Adults Aged 18 to 64: United States, 1989

	Model A		*Model B*		*Model C*		*Model D*		*Model E*		*Model F*		
	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	Beta	χ^2	χ^2 [1]
Intercept	-4.002	4395.78	-3.918	2883.20	-3.802	193.83	-4.161	224.98	-4.228	219.61	-3.994	297.36	---
Insurance													
Insured (Uninsured)	0.379	37.66 #	0.282	12.97 #	0.288	12.78 #	0.363	20.14 #	0.376	21.15 #	0.371	21.13 #	13.42 #
Work Disability													
Unable to work	2.145	1767.26 #	1.897	173.31 #	1.805	152.87 #	1.177	60.11 #	1.173	59.39 #	1.167	59.07 #	48.48 #
Limited in amount/kind	1.347	379.85 #	1.355	61.20 #	1.304	56.12 #	0.924	27.44 #	0.915	26.85 #	0.927	27.64 #	17.74 #
Limited in other activities	1.087	157.86 #	0.452	2.04	0.400	1.59	0.079	0.06	0.073	0.05	0.073	0.05	0.05
(Not limited in activity)													
Insurance and Disability Interactions													
Unable to work			0.286	3.44	0.280	3.26	0.190	1.48	0.194	1.53	0.199	1.62	1.57
Limited in amount/kind			-0.013	0.00	-0.008	0.00	-0.029	0.02	-0.019	0.01	-0.025	0.02	0.01
Limited in other activities			0.704	4.56 ‡	0.722	4.79 ‡	0.732	4.90 ‡	0.735	4.93 ‡	0.735	4.93 ‡	4.42 ‡
(Uninsured and not limited)													
Age													
Age in years					-0.034	8.26 §	-0.043	13.54 #	-0.042	12.92 #	-0.046	15.33 #	15.66 #
Age in years squared					4.18E-04	9.42 §	4.69E-04	11.74 #	4.63E-04	11.43 #	5.00E-04	13.54 #	14.21 #
Gender													
Men (Women)					-0.053	1.58	-0.008	0.04	-0.007	0.03	—	—	—
Race													
Black (White)					0.043	0.46	-0.071	1.23	-0.087	1.77	—	—	—
Other (White)					-0.180	1.84	-0.295	4.88 ‡	-0.297	4.93 ‡	-0.304 [2]	5.26 ‡	6.01 ‡
Hispanic Ethnicity													
Hispanic (Non-Hispanic)					0.055	0.51	-0.010	0.02	-0.022	0.08	—	—	—
Education													
Years of education					0.066	6.42 ‡	0.052	3.77	0.055	4.13 ‡	0.012	2.60	2.41
Years of education squared					-0.004	11.28 #	-0.002	2.81	-0.002	2.92	—	—	—
Marital Status													
Married					0.407	35.13 #	0.399	33.70 #	0.407	34.90 #	0.430	39.92 #	30.85 #
Previously married					0.510	37.58 #	0.488	34.24 #	0.487	33.98 #	0.501	36.86 #	31.34 #
(Never married)													
Health Status													
Very good (Excellent)							0.371	31.71 #	0.369	31.36 #	0.368 [3]	31.70 #	27.25 #
Good (Excellent)							0.874	184.18 #	0.868	181.19 #	0.871	187.67 #	130.97 #
Fair (Excellent)							1.290	254.61 #	1.280	248.98 #	1.276	255.82 #	157.74 #
Poor (Excellent)							1.745	314.26 #	1.733	306.28 #	1.725	310.69 #	210.29 #
Unknown (Excellent)							0.476	1.44	0.462	1.36	—	—	—
Family Income to Poverty Ratio													
1.75 to under 2.00 (Above 2.00)									-0.135	3.47	—	—	—
1.50 to under 1.75 (Above 2.00)									0.068	0.69	—	—	—
1.25 to under 1.50 (Above 2.00)									-0.025	0.07	—	—	—
1.00 to under 1.25 (Above 2.00)									0.189	3.90 ‡	—	—	—
0.50 to under 1.00 (Above 2.00)									-0.091	1.16	—	—	—
Less than 0.50 (Above 2.00)									0.271	6.95 §	0.266 [4]	7.50 §	6.53 ‡

Sample size (for all models) 68,211
Goodness of fit χ^2 (Hosmer)-Model F 29.43
Significance level with 8 degrees of freedom p<0.001

1. χ^2 corrected for complex sample design (using RTILOGIT).
2. Reference category is whites and blacks.
3. Reference category is excellent and unknown health status.
4. Reference category is poverty ratio 0.50 and higher.

— Variable dropped for final model.
‡ p<0.05.
§ p<0.01.
# p<0.001.

TABLE P. Logistic Regression Models of the Likelihood of Hospitalization Among Children Aged 0 to 17: United States, 1989

Variable	*Model A* Beta	χ^2	*Model B* Beta	χ^2	*Model C* Beta	χ^2	χ^2 [1]
Intercept	-4.155	1463.38	-3.556	52.27	-4.182	70.47	- - -
Insurance							
Insured (Uninsured)	0.099	0.73	0.208	2.99	0.253	4.42 ‡	3.92 ‡
Activity Limitation							
Unable to perform major activity	2.609	168.19 #	2.659	163.30 #	1.843	61.33 #	67.56 #
Limited in amount/kind	1.219	71.27 #	1.493	99.45 #	1.023	41.15 #	22.68 #
Limited in other activities	1.304	44.06 #	1.468	53.09 #	1.105	28.61 #	22.60 #
(Not limited in activity)							
Age							
Age in years			-0.443	251.17 #	-0.440	243.31 #	190.04 #
Age in years squared			0.023	201.56 #	0.023	193.64 #	169.40 #
Gender							
Boys (Girls)			0.105	1.61	—	—	—
Race							
Black (White)			-0.134	1.32	-0.293	6.17 ‡	4.77 ‡
Other (White)			-0.462	2.77	-0.563	4.10 ‡	4.54 ‡
Hispanic Ethnicity							
Hispanic (Non-Hispanic)			-0.004	0.00	—	—	—
Family Education							
Years of education			0.161	4.58 ‡	0.171	4.85 ‡	2.96 ‡
Years of education squared			-0.009	8.85 §	-0.008	6.44 ‡	4.15 ‡
Health Status							
Very good (Excellent)					0.355	10.62 #	8.43 #
Good (Excellent)					0.943	73.57 #	45.46 #
Fair (Excellent)					1.463	70.53 #	49.72 #
Poor (Excellent)					2.364	65.55 #	45.51 #
Unknown (Excellent)					—	—	—

Sample size (for all models)	31,524
Goodness of fit χ^2 (Hosmer)-Model F	18.76
Significance level with 8 degrees of freedom	p=0.016

1. χ^2 corrected for complex sample design (using RTILOGIT).
2. Reference category is excellent and unknown health status.

— Variable dropped for final model.

‡ p<0.05.

§ p<0.01.

# p<0.001.

degree of sampling error. Among children unable to perform their major activity, those without insurance average 10.3 hospitalizations, significantly lower than the 82.9 annual rate for those with insurance. The hospitalization rate for children on Medicaid unable to perform their major activity is very high (106.8 per 100 children). Furthermore, the hospitalization rate for children in poor health and who have Medicaid is very high. Hospitalization of children can be catastrophically expensive, and some children with large hospital bills may be covered by Medicaid under medically needy programs. This may be the reason that the hospitalization rate is very high for children with severe disabilities or poor health.

Regression analysis

Logistic regression analysis shows that insurance does not significantly predict the likelihood of hospitalization (Table P, model A). Age, race, educational attainment of family head, degree of disability, and health status are significant (model C). When these variables are controlled, insurance emerges as significant at the $p<.05$ level. None of the interaction terms for insurance and degree of activity limitation is significant. Poverty does not predict the rate of hospitalization of children. In conclusion, uninsurance has at best a weak effect on hospitalization of children, and certainly pales in comparison to the effect of uninsurance among adults.

Reliability of hospitalization statistics

Hospital discharge rates and average length of stay statistics for children and adults on Medicaid approximate program statistics. It is estimated that people on Medicaid experience 2.4 million discharges and 21.1 million days of care. Program statistics indicate in 1986 that 3.7 million discharges and 29.3 million total days of care were covered by Medicaid (Ruther et al., 1990). Thus, the NHIS finds a lower rate of discharge, and a higher average length of stay. For Medicare, there are 1.1 million discharges estimated compared to 1.2 million actual, and 10.2 million days estimates compared to 9.6 actual. Estimated discharges and days for people on Medicaid or Medicare are not necessarily those that are covered by these programs. Also, mortality and institutionalization is not accounted for by NHIS estimates. The latter is more significant for Medicaid estimates and may account for the lower estimate of days of care.

3 Disability, Poverty, Employment, and Insurance

Two important factors associated with high risk of being uninsured are unemployment and poverty. However, because the majority of the uninsured are employed, the employment relationship provides an attractive option for policy development. The factors of disability, poverty, and employment are explored more systematically in the following sections.

3.1 Adults

In Table 9, data on poverty status, employment, disability, and insurance coverage are presented for adults. Federal definitions of severe disability (as defined by the Social Security Administration) and of certain needy groups with low income and resources (as defined by the Department of Health and Human Services) are the principal eligibility criteria for public insurance. Earlier tables showed rates of private insurance coverage; here, additional information on the source of private coverage is provided. The data are arrayed so that the relationships and interrelationships of disability and poverty with insurance coverage can be examined simultaneously. Poverty is defined as total family income below 125% of the federal poverty line. Significance levels of statistical comparisons by poverty status are flagged in Table 9.

About 13.8% of adults aged 18 to 64 are poor. Poverty has substantial negative associations with employment and with private insurance, and positive associations with public insurance and with disability. About a third of people who need assistance in basic life activities of self care (ADL) or routine activities (IADL) or who are unable to work are poor. Among people who need assistance in self care, 32.1% are poor, and of them, 13.5% have private coverage, 81.8% have public insurance, and 11.3% are uninsured. About 34.4% of people who need assistance in routine activities are poor, and of them, 18.7% have private coverage, 68.2% have public insurance, and 21.2% are uninsured. And 34.0% of people who are unable to work are poor, and of them, 16.4% have private coverage, 63.2% have public coverage, and 24.4% are uninsured.

Source of coverage

Poverty also has an impact on the source of private coverage. Employment-related private insurance may be provided through a current or previous employer or union, or through a family member's current or previous employer or union. About 90.3% of non-poor people who have private insurance receive it from an employer or union;[17] for the 9.7% who don't, they obtain private insurance through other sources, such as by purchasing individual plans or group plans offered by professional and other membership associations. However, about 24.9% of poor adults with private insurance obtain their insurance from sources other than employers. These fractions are relatively constant by age group. Poor

[17] This percentage is calculated by dividing the percentage with private insurance from an employer by the percentage with private insurance, multiplied by 100 and subtracting the result from 100.

people who are not working or whose employers do not provide health insurance may be inclined to purchase inexpensive limited indemnity plans. In 1989, the insurance industry collected $96.1 billion in group premiums and $11.8 billion in individual premiums (Health Insurance Association of America, 1991). Since most of the non-poor obtain their coverage from employers, it is likely that a disproportionate share of individual plans are purchased by people with low incomes.

A large fraction of employment-based private coverage is obtained from relations with other family members, usually through a working spouse's or parent's private health plan. Only 64.4% of non-poor adults with employment-based private insurance have that coverage in their own name, but only 49.0% of poor people. About 44.8% of non-poor people aged 18 to 24 with private insurance receive it from an employer in their own name, compared to 24.2% of the non-poor—presumably most of the latter have insurance from a parent or legal guardian.

The working poor

As discussed earlier, poor adults are approximately three times as likely to be uninsured as non-poor adults (39.8% vs. 13.1%). Poor adults are much less likely than non-poor adults to be employed (47.2% versus 79.9%, t=47.2, p<.001). But employment is also less likely to provide insurance for the poor: 46.6% of the working poor have private insurance compared to 86.4% of the working non-poor (t=40.6, p<.001).

The working poor—totaling 9.7 million people—are much more likely to be uninsured than the working non-poor (45.9% versus 12.1%, t=34.5, p<.001), mostly due to their lower rate of private health insurance. One of the ironies of American health and welfare policy is that many poor people who do not work at all are entitled to insurance coverage while many of those who are working and struggling are not. Many of the working poor work part-time or at low-paying jobs.[18] Because the working poor have earnings, they are also less likely to be eligible for public insurance than the non-working poor. As a result, the working poor are much more likely to be uninsured than the working non-poor (45.9% versus 12.1%) or the poor people not in the labor force (31.6%). Only unemployed people in poverty have a rate of uninsurance exceeding the working poor (51.0%).

Disability

Among poor people who need assistance in self-care activities, few have private coverage (13.5%). All but 28.1% of those with private insurance obtain coverage from employers, about the same fraction as for all poor people. Non-poor people who need assistance in self care activities have a much higher rate of private coverage (61.1%), though few work (13.0%). They have a higher likelihood of obtaining private insurance from sources other than employers (21.3%) than non-poor people in general (9.7%). This may indicate that some actually do purchase supplemental private insurance.

People needing assistance in self care who are not poor also are likely to have insurance from previous employment, and the proportion with employment-based coverage in their own name is about nine times as high as those who are poor (26.3% versus 2.6%, t=5.27, p<.001). In fact, the non-poor needing assistance in self care are almost twice as likely to have private insurance obtained from an employer in their own name (23.6%) as they are to recently have worked. One would conjecture that most of those who have this coverage have it as a benefit of disability or retirement pensions. Since they are not poor, they must rely on Medicare. Of those on SSDI, some may continue their previous employment-based coverage under COBRA during the waiting period for Medicare. But such coverage can be expensive—the average premium paid for employer group coverage in 1989 was $145 per month for an individual and $316 for a family (Health Insurance Association of America, 1991). People with ADL limitations who are poor depend heavily on public insurance (81.8%), predominantly Medicaid, and 11.3% are uninsured.

Of the few people with ADL limitations who work, the uninsurance rate for those who are poor is 23.3%—less than the rate for all poor people—and 14.6% for those who are not poor—which is about average. For people with ADL limitations who work and are insured, their insurance may not be provided by their current employer, but instead may be provided through public insurance or through a previous employer or a relative's employer.

Of people who need assistance in routine activities (IADL) and are not poor, 65.5% have private insurance and about 89.0% of them obtain their insurance from an employer—the same as for non-poor people in general. Of the 30.0% who work, 12.7% do not have insurance. Of people who need assistance in routine activities (IADL) and are poor, only 9.8% work and 36.7% of those who work are uninsured.

People who are unable to work, whether poor or not, are about as likely as those with ADL limitations to have private insurance but are less likely to have public insurance. In terms of private and public coverage, people unable to work are similar to people with IADL limitations, but they are less likely than those limited in the amount or kind of work to have private insurance and are more likely to have public insurance. Of those who are unable to work and are not poor, about 52.7% with employment-related coverage do not have coverage in their own name—higher than the average for all non-poor people (35.6%). Thus, people who are unable to work and are not poor are more likely than the average non-poor person to obtain private insurance from others'

[18] No data on hours worked are available in the NHIS core or insurance supplement.

employment-related plans. However, poor people who are unable to work are about as likely as the average poor person to obtain private insurance from others' employment-related plans.

Some people who are classified in the NHIS as unable to work reported some recent work activity in the two weeks prior to the interview—about 16.5%.[19] Among non-poor people unable to work, a higher proportion have employment-related coverage in their own name than have worked recently (25.5% versus 21.1%), indicating that a substantial fraction are continuing coverage from a previous employer.

Most people with limitations in the amount or kind of work they can do are employed—76.3% of those who are non-poor and 53.6% of those who are poor. About 44.3% of the latter group are uninsured. These are the working poor with disabilities—people who have changed jobs or cut back on the amount of time they work because of chronic impairments or health problems.

Of people with ADL limitations, those who are poor have a low rate of uninsurance (11.3%), which is not significantly different from those who are not poor (12.4%). But of people with less severe disabilities—those with IADL limitations or those unable to work—those who are poor are twice as likely as those who are not poor to be uninsured. Around 40% of poor people with moderate to minor disabilities—those who are limited in amount or kind of work or are limited in activities other than work—or who are not limited in activity are uninsured: about three times the rate of similarly disabled people who are not poor. Thus, only poor people with the most severe disabilities have a relatively low rate of uninsurance; poor people with less severe disabilities, like the poor in general, have high rates of uninsurance.

Gender and disability

Of non-poor people who need assistance in basic life activities, men are more likely than women to have public coverage (for ADL, 65.5% versus 50.4%, t=2.22, p<.05; for IADL, 55.8% versus 33.0%, t=6.03, p<.001), mostly Medicare. Among the poor, men and women are about as likely to receive public insurance (for ADL, 85.6% versus 79.0%; for IADL, 72.9% versus 65.7%), mostly Medicaid. The penetration of public insurance for poor men with ADL limitations is the highest of any group studied: only 3.0% of this group is uninsured. Of poor women with ADL limitations, 17.4% are uninsured, significantly higher than the 3.0% of men (t=2.65, p<.01).

Of people unable to work, non-poor men are more likely to have public coverage than non-poor women (46.1% versus 31.7%, t=6.36). However, among the poor, there is no difference by gender (63.4% and 63.1%). Of poor people with less severe disabilities (limitation in activities other than work) or no disabilities, women are much more likely to have public coverage than men. For example, of those limited in amount or kind of work, 22.0% of poor men have public coverage, compared to 33.8% of poor women (t=2.60, p<.05). About 50% of men who are poor and have less severe disabilities or no disabilities are uninsured, compared to about a third of women. Of the working poor with less severe disabilities, roughly half of men are uninsured, and about 40% of women.

Table 9 can be used to provide estimates of how the 25.2 million adults who are uninsured would be affected by certain policy options including mandating employer health coverage and expanding public insurance. If all people who work were provided insurance, the rate of uninsurance among non-poor persons could be reduced to 3.4%; among the poor the uninsurance rate would be 18.1%. These are abstract targets, since not all employers would be expected to insure their workers directly, particularly small businesses. Nevertheless, if all workers were covered by insurance, this would cover 12.5 million non-poor and 4.5 million poor people who work and are uninsured. The remaining uninsured would be those who are unemployed or out of the labor force. Of the unemployed uninsured, about 1.1 million are not poor and 0.8 million are poor. People uninsured and not in the labor force could be addressed through some form of public insurance expansion. Approximately 6.3 million people are out of the labor force and uninsured—3.3 million non-poor and 3.0 million poor.

[19] The category "unable to work" is based on the question "Does any impairment or health problem NOW keep *person* from working at a job or business?" The two-week employment question is "During those two weeks, did *person* work at any time at a job or business not counting work around the house? (Include unpaid work in the family farm or business)." A "yes" response to the first question does not necessarily mean the individual is incapable of working at *any* job. The second question, however, is ambiguous as to the nature of employment—the individual could be engaged part-time in supported employment or in a full-time job earning high salary, or have just worked a day or two without having a steady job. These questions leave unresolved a number of issues about "inability to work" and the nature of work. Among people who worked during the two weeks, those who reported they are kept from working at a job are more likely to be poor than those limited in amount or kind of work they can do (17.6% versus 13.3%, t=2.18, p<.05). And the pattern of insurance coverage also differs somewhat between these two groups. This argues against reclassifying those "unable to work" who are working to the category "limited in the amount or kind of work." In short, the "unable to work" question may or may not address the concept of being unable to work at *any* job or business and further analysis is required to determine whether people who report some work activity in the past two weeks are in fact misclassified. This is a task that requires additional information about the nature of their employment (sheltered or not, self-employment, home employment, earnings, etc.) that is not currently available from the NHIS core or insurance supplement. The strength of some earlier comparisons of people "unable to work" with other groups may be diluted if those who report some work activity during the two weeks are in fact missclassified as "unable to work."

3.2 Children

About 25.5% of children are poor (Table 10), and those in poverty are three times as likely as those not in poverty to be uninsured (32.7% vs. 10.0%). Significance levels of non-poor and poor comparisons are flagged in Table 10. As with adults, children who are poor and have private insurance are twice as likely to obtain insurance from sources other than employers (18.2% versus 9.3%).

About 39.7% of children in poverty have public coverage compared to 5.3% of children who are not poor. Of children aged 5 to 17 who need assistance in self care, 36.9% are in poverty, and of them, 80.6% have public coverage and 11.6% are uninsured. Of those not poor, 32.1% have public coverage and 8.6% are uninsured. About a third of children limited in major activity are poor, and a quarter of them are uninsured, twice the rate of uninsurance among non-poor children with activity limitation. Severely disabled poor children are less likely to be uninsured than other poor children.

Children whose health is good, fair, or poor are more likely to be poor (42.6%, 48.0%, and 61.4% respectively) and like all children in poverty, about a third of them are uninsured. No differences are found for boys compared to girls.

Of the 10.1 million children who are uninsured, 4.8 million are not poor and 5.3 million are poor. The number of poor children who are uninsured has been reduced by recent expansions of Medicaid, through which coverage is provided for all infants less than 1 year old and all children under age 19 (born after September 30, 1983) whose family income is below 100% of the poverty level.

CONCLUSIONS

Some 4.1 million Americans with disabilities have no health insurance, public or private, out of a total uninsured population of 35.3 million adults and children. People with disabilities who lack insurance utilize health services significantly less frequently than similarly disabled people with insurance, even when health status and sociodemographic factors are controlled statistically. Depending on the degree of disability, adults without insurance have from 19% to 44% fewer physician contacts and from 29% to 65% fewer hospitalizations than those with insurance. Children with disabilities have 34% fewer physician contacts if uninsured and a lower rate of hospitalization, though the effect of uninsurance on hospitalization is weaker than for adults.

Health care reform should guarantee that all people with disabilities have insurance. People with disabilities are in worse health in general and are at great risk of needing immediate and sustained health services. When they lack insurance, they may not be able to obtain the care they need, potentially increasing the risk of worsening health and secondary conditions that might have been prevented (Marge, 1988; Pope & Tarlov, 1991).

People are uninsured when they have no private insurance and are ineligible for, or fail to avail themselves of, programs that provide public insurance coverage. Uninsurance is not a problem for those of high economic status: only 5.3% of people in families with incomes of $50,000 or more are uninsured. Among adults, private insurance is associated with age, being female, being white, being non-Hispanic, education, marriage, good health, affluence, work, and absence of disability. Public insurance is correlated with being black or races other than white, low education, being unmarried, poor health, poverty, not working, and disability. Among children, private insurance is correlated with affluence, good health, and absence of disability and public insurance is associated with poverty, poor health, and disability. This general pattern suggests that public programs compensate for problems in accessing private insurance. However, public programs do not always compensate well for reduced access to private insurance, even for people in poverty or with disabilities, the two major target populations for public programs.

Public insurance is not targeted to all groups that lack access to private insurance, and therefore uninsurance remains a problem. Access to private insurance is greater for some populations, depending on factors such as occupation, industry, and firm size. Spousal benefits confer advantage to married individuals and their dependents. Medicare and Medicaid compensate for lack of access to private insurance, but only for certain people with disabilities and certain groups of poor people. This results in a very uneven patchwork of insurance coverage.

The fraction of people covered by private insurance declines steeply as the severity of disability is greater. At the same time, coverage under Medicare and Medicaid increases, lowering the rate of uninsurance of people needing assistance in basic life activities (ADL or IADL) to slightly below the average for all people. People with moderate disabilities (who do not need assistance in basic life activities but are unable to work or are limited in the amount or kind of work they can do) are in fact more likely than people with severe disabilities or people without disabilities to be uninsured.

The group with the lowest rate of uninsurance (3.0%) is poor men needing assistance in self care who have the highest rate of public coverage (85.6%) of any population. Among non-poor men needing assistance in self care, 65.5% have public insurance and 10.7% are uninsured.

Access to public insurance is difficult for poor men with moderate disabilities. Of men who are poor and limited in the amount or kind of work they can do, 22.0% receive public insurance and half are uninsured, whereas 33.8% of women in this category have public insurance, and 36.9% are uninsured. Almost a quarter of poor children with disabilities are uninsured.

While some people with disabilities go without any insurance, many profit by supplementing public coverage with private insurance. Private coverage may defray Medicare deductibles and coinsurance payments, and to pay for non-covered services (U. S. Congressional Budget Office, 1991). In the present study, about 40% of nonelderly Medicare beneficiaries are estimated to have private insurance, a finding supported by other research (Muller, 1989; Rubin & Wilcox-Gok, 1991). For nonelderly people with disabilities on Medicare, private insurance may cover Medicare deductibles, copayments, and non-covered services.[20] Copayments under Medicare are not limited and enrollees are at risk of high out-of-pocket expenses.

Though there is a market for supplemental Medicare coverage (Medigap plans) among the elderly, such plans are not widely available for nonelderly Medicare beneficiaries. Private insurers have little incentive to design plans to supplement Medicare for nonelderly Medicare beneficiaries—all of whom have pre-existing health conditions and impairments and may have high needs for pharmaceuticals and other services not covered by Medicare. Therefore, nonelderly Medicare beneficiaries who have employment-based private insurance probably obtain it through a spouse's plan, their own previous employment,[21] or their own current employment. Since the premiums of employment-based insurance are heavily subsidized by employers, it may be cost-effective for many Medicare beneficiaries to have private coverage through a spouse.

In 1986, legislation established Medicare as the secondary payer to employment-based health insurance for employers with at least 100 employees. Savings are estimated to be $500 million in 1989 (U.S. General Accounting Office, 1991), and more could be recovered (U.S. General Accounting Office, 1992). In 1989, Medicare payments for people with disabilities amounted to $10.4 billion (Social Security Administration, 1990, Table 7.B2). The federal government has also begun to shift costs from Medicaid and CHAMP-US to large employer group insurance plans. These efforts however only cover large employers. About two-thirds of workers work for employers with fewer than 100 employees.

Money saved through such cost-shifting could be applied to extend public coverage to people with severe disabilities who are uninsured. It is ironic that of people with very severe disabilities who need assistance in self care, 12.1% go without any insurance, while half of the 35.8% with Medicare also have private coverage.

People with severe disabilities who are uninsured are of particular concern. The 1.4 million adults who are unable to work and are uninsured are a substantial population that may be at great risk of adverse health consequences. Their access to health services is significantly restricted compared to those who are unable to work and who have insurance. Half of them are poor. It is possible that the reduced access that uninsured people with severe disabilities experience could impact their survival. People with severe disabilities who are uninsured are an unfortunate example of how the American health care system fails to deliver protection for those who most need acute health services.

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[20] In 1989, the Medicare hospital deductible was $560. Because the deductible is for each spell of illness, it may be incurred more than once in a year. Due to catastrophic coverage being in effect in 1989, there was no co-payment for hospital days. The physician deductible was $75 and the co-payment was 20% of physician services. A 20% co-payment is also required for durable medical equipment. Given the high annual rates of hospitalization (39.4 per 100 persons) and annual physician contacts (13.6 per person) for Medicare beneficiaries, outlays for Medicare beneficiaries may be substantial. Also, private insurance may cover services not covered by Medicare, including pharmaceuticals and long-term home health services.

[21] COBRA terminates upon Medicare enrollment, so any individuals who have private insurance through a previous employer must have it as a benefit of retirement or disability.

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TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

					Private insurance and			Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Total	150,309	68,211	77.2	74.7	0.7	0.3	0.1	5.8	0.6	3.5	0.4	2.5	1.1	1.3	0.4	16.7
Age																
18-24 years	25,401	11,013	63.9	62.7	0.1 *	0.5	0.0	6.3	0.1 *	5.3	0.1 *	2.0	1.5	0.5	0.7	28.3
25-44 years	78,794	35,589	78.5	77.2	0.2	0.3	0.1	4.7	0.3	3.5	0.3	1.5	0.8	0.7	0.0	16.3
45-64 years	46,114	21,609	82.2	77.0	1.8	0.3	0.2	7.2	1.3	2.6	0.8	4.5	1.5	2.7	0.4	11.1
Race																
White	127,549	56,501	79.8	77.3	0.7	0.3	0.1	4.6	0.5	2.5	0.3	2.5	1.0	1.3	0.3	15.5
Black	17,477	9,480	60.8	58.2	0.7	0.8	0.1 *	14.1	1.2	10.1	0.9	2.6	1.4	0.9	1.0	24.3
Other	5,283	2,230	68.0	65.5	0.2 *	0.3 *	0.0	7.0	0.2 *	6.0	0.2 *	3.5	1.6	1.9	1.4 *	22.7
Ethnicity																
Hispanic	12,118	5,326	53.9	52.2	0.4 *	0.5	0.1 *	9.8	0.6	7.4	0.7	1.9	1.0	0.8	0.7	35.5
Non-Hispanic	138,191	62,885	79.2	76.7	0.7	0.3	0.1	5.4	0.6	3.2	0.4	2.6	1.1	1.3	0.4	15.1
Education																
Less than 12 years	27,181	12,676	54.0	50.7	1.5	0.7	0.2	16.2	1.7	10.4	1.4	2.0	0.9	0.8	0.5	30.8
12 years	59,345	27,021	77.1	74.6	0.7	0.4	0.1	5.1	0.4	3.1	0.2	2.7	1.3	1.3	0.5	17.3
Some college	32,511	14,535	83.5	81.3	0.3	0.2	0.1 *	2.5	0.2	1.4	0.2	3.1	1.3	1.7	0.4	12.9
College graduate	30,583	13,649	91.8	89.9	0.5	0.0	0.0	1.1	0.2	0.3	0.0	2.1	0.7	1.3	0.2	6.8
Unknown	689	330	49.8	43.9	0.9 *	3.1 *	1.6 *	20.9	3.2 *	8.1	3.9 *	1.2 *	0.9 *	0.3 *	0.3 *	33.8
Age & Education																
18-24 years &																
Less than 12 years	5,333	2,378	41.9	40.6	0.1 *	0.9	0.1 *	14.6	0.3 *	12.8	0.4 *	1.3	1.1	0.3 *	0.8	42.8
12 years	10,897	4,746	61.4	60.3	0.1 *	0.6	0.0	6.1	0.1 *	5.1	0.1 *	2.3	1.8	0.4	0.9	30.6
Some college	7,269	3,092	78.5	77.6	0.1 *	0.1 *	0.0	1.9	0.0	1.5	0.1 *	2.2	1.5	0.6	0.6	17.8
College graduate	1,819	757	85.2	84.1	0.4 *	0.0 †	0.0 †	0.4 *	0.0 †	0.1 *	0.0 †	1.4 *	0.7 *	0.7 *	0.3 *	13.8
Unknown	83	40	53.8	38.0	2.4 *	8.4 *	4.9 *	27.7	0.0 †	9.2 *	2.8 *	0.0 †	0.0 †	0.0 †	0.0 †	34.3
25-44 years &																
Less than 12 years	10,307	4,723	48.6	47.0	0.5 *	0.6	0.2 *	16.0	0.8	12.6	1.2	1.0	0.5	0.3 *	0.3	35.8
12 years	30,151	13,755	77.1	75.7	0.3	0.4	0.1 *	4.8	0.3	3.5	0.2	1.6	0.9	0.7	0.4	17.7
Some college	17,961	8,058	83.8	82.3	0.1	0.2	0.0	2.3	0.2	1.6	0.1 *	2.2	1.0	1.1	0.3	12.9
College graduate	20,032	8,892	91.9	90.9	0.2 *	0.0	0.0	0.7	0.1 *	0.3	0.0	1.2	0.5	0.6	0.2	7.0
Unknown	344	161	48.7	41.8	0.7 *	4.2 *	2.0 *	23.1	2.9 *	10.2	3.2 *	0.0 †	0.0 †	0.0 †	0.5 *	34.5
45-64 years																
Less than 12 years	11,542	5,575	64.4	58.8	3.0	0.6	0.3	17.1	3.1	7.4	2.1	3.2	1.2	1.5	0.6	20.8
12 years	18,296	8,520	86.4	81.2	1.7	0.3	0.1 *	4.9	0.8	1.3	0.4	4.8	1.6	2.9	0.4	8.9
Some college	7,281	3,385	88.0	82.2	1.0	0.3 *	0.2 *	3.4	0.5	0.9	0.3	6.3	1.9	4.1	0.4 *	8.0
College graduate	8,733	4,000	93.0	88.8	1.1	0.1 *	0.0	2.2	0.4	0.3	0.0	4.3	1.2	2.9	0.1 *	4.8
Unknown	263	129	49.9	48.4	0.8 *	0.0 †	0.0 †	15.7	4.8 *	5.1 *	5.1 *	3.1 *	2.3 *	0.7 *	0.0 †	32.8
Marital Status																
Married	98,752	44,703	83.6	80.9	0.8	0.2	0.1	3.3	0.4	1.6	0.1	3.0	1.2	1.6	0.3	12.6
Widowed	3,310	1,607	66.4	61.1	2.6	0.7	0.1 *	14.7	3.1	6.3	1.6	4.4	2.2	1.8	0.4 *	19.7
Divorced	11,511	5,366	66.2	63.8	0.6	0.6	0.1 *	11.4	1.2	7.5	1.1	2.6	1.1	1.1	0.7	21.9
Separated	3,599	1,766	51.7	49.1	0.6 *	1.1	0.1 *	22.0	0.9	18.0	1.2	2.3	1.4	0.8	0.7	26.0
Never married	32,937	14,675	65.7	64.0	0.4	0.7	0.2	8.5	0.5	5.8	0.8	1.0	0.5	0.4	0.6	25.9
Unknown	199	94	66.8	61.8	1.4 *	1.0 *	0.6 *	8.8 *	0.9 *	3.9 *	1.1 *	2.0 *	0.0 †	2.0 *	0.0 †	27.3

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

					Private insurance and			Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Employment Status																
Currently employed	113,327	50,944	83.0	81.3	0.2	0.2	0.0	1.3	0.1	0.8	0.0	2.1	0.8	1.3	0.3	15.1
Unemployed	4,641	2,139	47.4	45.7	0.0	0.6 *	0.1 *	10.9	0.2 *	9.6	0.3 *	3.0	2.0	1.0	0.5	39.9
Not in labor force	32,341	15,128	61.1	55.6	2.6	1.0	0.3	20.8	2.3	12.3	1.7	4.1	2.1	1.4	0.8	19.3
Employment Status & Age																
Currently employed &																
18-24 years	17,646	7,537	69.3	68.5	0.1 *	0.2	0.0	1.7	0.1 *	1.3	0.0	1.7	1.3	0.4	0.6	27.5
25-44 years	64,285	28,774	84.0	82.9	0.1	0.2	0.0	1.3	0.1	0.9	0.0	1.3	0.5	0.8	0.2	14.3
45-64 years	31,396	14,633	88.6	85.3	0.3	0.1 *	0.0	1.0	0.1	0.3	0.1	3.9	1.0	2.8	0.3	9.6
Unemployed &																
18-24 years	1,384	617	41.8	40.5	0.0 †	1.1 *	0.0 †	12.2	0.3 *	10.3	0.2 *	1.6 *	1.2 *	0.2 *	0.8 *	45.1
25-44 years	2,400	1,109	44.6	43.3	0.0	0.6 *	0.1 *	12.3	0.1 *	11.2	0.2 *	2.6	2.0	0.6 *	0.4 *	41.4
45-64 years	858	413	64.4	60.8	0.0 †	0.0 †	0.3 *	5.1	0.2 *	3.9 *	0.7 *	6.4	3.0	3.3	0.4 *	27.3
Not in labor force &																
18-24 years	6,371	2,859	53.7	51.5	0.2 *	1.2	0.1 *	17.8	0.2 *	15.5	0.5	2.9	2.1	0.7	1.1	26.8
25-44 years	12,109	5,706	56.1	53.6	0.8	1.1	0.3	21.4	1.5	15.8	1.6	2.6	1.9	0.3	0.7	22.0
45-64 years	13,860	6,563	68.8	59.3	5.3	0.8	0.5	21.6	4.0	7.7	2.3	5.9	2.3	2.6	0.7	13.5
Family Income																
Under $5,000	5,743	2,668	36.0	33.8	0.5 *	1.0	0.2 *	28.8	1.0	23.4	2.3	1.9	1.1	0.5 *	0.9	34.9
$5,000-$6,999	3,689	1,717	29.6	27.0	0.8	1.4	0.1 *	31.9	3.4	23.4	2.6	1.9	1.4	0.3 *	1.3	38.1
$7,000-$9,999	5,095	2,504	31.2	28.3	1.1	1.2	0.1 *	28.1	2.5	20.6	2.1	2.2	1.5	0.3 *	0.7	41.0
$10,000-$14,999	12,298	5,743	48.7	45.9	1.6	0.7	0.2	12.6	1.4	7.6	0.9	2.2	1.7	0.3	0.9	38.5
$15,000-$19,999	16,317	7,508	65.2	62.5	1.3	0.6	0.2	6.8	0.9	3.2	0.5	2.3	1.6	0.6	0.6	28.0
$20,000-$24,999	11,907	5,393	78.4	73.8	0.9	0.4	0.1 *	3.9	0.5	1.7	0.2 *	3.1	1.7	1.2	0.4	17.0
$25,000-$34,999	30,144	13,504	85.1	82.4	0.7	0.2	0.1 *	2.3	0.3	0.7	0.1	2.8	1.0	1.7	0.4	12.3
$35,000-$49,999	33,464	15,053	89.7	87.4	0.3	0.1 *	0.1 *	1.1	0.1 *	0.3	0.1	2.6	0.8	1.7	0.1	8.8
$50,000 or more	31,653	14,119	93.6	91.4	0.4	0.1 *	0.0	0.7	0.1	0.1 *	0.0	2.4	0.6	1.8	0.2	5.3
Poverty Level																
Under 0.50	5,112	2,397	29.5	27.3	0.4 *	1.3	0.0	32.6	0.8 *	29.0	0.8 *	1.5	0.8	0.4 *	1.0	37.9
0.50 to under 1.00	9,543	4,562	31.3	29.4	0.6	1.0	0.2 *	28.2	2.1	21.5	2.6	1.6	1.2	0.2 *	1.0	40.1
1.00 to under 1.25	6,063	2,877	45.6	43.4	0.8	0.8	0.2 *	13.4	1.6	8.4	1.4	1.9	1.4	0.4 *	0.6	40.8
1.25 to under 1.50	6,945	3,276	55.6	53.5	0.8	0.7	0.1 *	10.2	1.6	5.6	1.0	2.7	1.9	0.4 *	0.7	33.2
1.50 to under 1.75	10,712	4,973	70.3	67.6	0.9	0.6	0.2 *	5.5	0.7	2.5	0.4	2.7	1.7	0.9	0.4	23.8
1.75 to under 2.00	17,583	8,001	79.7	77.7	0.7	0.3 *	0.1 *	3.2	0.5	1.2	0.3	2.0	1.1	0.9	0.5	16.6
2.00 and above	94,352	42,125	88.3	85.6	0.7	0.2	0.1	1.7	0.3	0.4	0.1	2.8	1.0	1.7	0.3	9.7
Poverty Level and Age																
18-24 years &																
Under 0.50	2,118	937	47.7	46.3	0.2 *	0.4 *	0.0 †	19.1	0.0 †	18.3	0.1 *	1.9 *	1.1 *	0.7 *	1.3 *	31.5
0.50 to under 1.00	2,780	1,248	39.9	39.0	0.1 *	0.5 *	0.0 †	17.5	0.4 *	16.3	0.2 *	1.6	1.3	0.3 *	1.4	40.5
1.00 to under 1.25	1,528	693	39.2	38.5	0.0 †	0.5 *	0.0 †	11.2	0.2 *	10.1	0.3 *	2.2 *	1.9 *	0.1 *	0.0 †	48.2
1.25 to under 1.50	1,506	683	50.0	49.0	0.1 *	0.7 *	0.2 *	8.7	0.0 †	7.3	0.5 *	2.3	2.2	0.1 *	0.9 *	39.1
1.50 to under 1.75	2,079	926	54.2	52.5	0.2 *	1.2 *	0.1 *	5.8	0.6 *	3.6	0.2 *	2.7 *	2.5 *	0.2 *	0.6 *	38.4
1.75 to under 2.00	3,452	1,506	69.0	68.1	0.1 *	0.3 *	0.0	2.8	0.1 *	2.0	0.2 *	2.1	1.5	0.5 *	0.9 *	26.2
2.00 and above	11,938	5,020	77.4	76.2	0.2 *	0.4	0.0	1.6	0.0	0.9	0.1 *	1.8	1.3	0.5	0.5	19.8

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

					Private insurance and				Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
25-44 years &																
Under 0.50	2,235	1,070	15.0	12.6	0.0	2.1	0.1 *	43.8	0.7 *	39.9	0.8 *	0.7 *	0.4 *	0.1 *	0.6 *	42.5
0.50 to under 1.00	4,474	2,156	28.6	26.7	0.5 *	1.3	0.0	28.3	1.0	23.3	1.9	1.2	0.9	0.0	0.7	43.3
1.00 to under 1.25	3,167	1,489	48.8	47.2	0.2 *	0.9 *	0.2 *	11.5	1.2	7.8	1.1	1.4 *	1.1 *	0.2 *	0.6 *	39.3
1.25 to under 1.50	3,638	1,689	58.3	56.9	0.3 *	0.7	0.2 *	7.0	0.7	4.6	0.5 *	1.4	1.2	0.2 *	0.4 *	34.3
1.50 to under 1.75	6,530	3,022	75.9	74.2	0.4 *	0.3 *	0.1 *	3.6	0.3 *	2.2	0.3 *	2.2	1.3	0.8	0.4 *	19.7
1.75 to under 2.00	10,253	4,648	83.2	81.9	0.2 *	0.3 *	0.1 *	1.9	0.2 *	0.9	0.2 *	1.6	0.9	0.7	0.4	14.2
2.00 and above	48,496	21,515	88.9	87.7	0.2	0.1	0.1	0.9	0.1	0.3	0.1	1.5	0.6	0.9	0.2	9.7
45-64 years &																
Under 0.50	759	390	21.3	17.5	1.9 *	1.4 *	0.0 †	37.0	3.1 *	27.1	3.1 *	2.6 *	1.6 *	0.5 *	1.1 *	42.3
0.50 to under 1.00	2,290	1,158	26.3	22.9	1.6	0.9 *	0.6 *	41.0	6.3	24.3	6.9	2.2	1.5	0.3 *	1.0 *	33.3
1.00 to under 1.25	1,367	695	45.3	40.0	3.1	0.8 *	0.1 *	20.2	4.3	8.1	3.3	3.0	1.6 *	1.0 *	1.2 *	36.0
1.25 to under 1.50	1,801	904	54.7	50.5	2.4	0.6 *	0.1 *	18.1	4.9	6.2	2.4	5.7	3.1	1.0 *	1.2 *	26.1
1.50 to under 1.75	2,103	1,025	69.0	62.2	3.1	1.0 *	0.7 *	11.4	2.0	2.7	1.1 *	4.5	2.1	1.6	0.5 *	22.2
1.75 to under 2.00	3,875	1,847	80.1	75.0	2.6	0.5 *	0.3 *	7.2	1.8	1.3	0.6 *	3.1	1.3	1.7	0.6 *	14.3
2.00 and above	33,919	15,590	91.3	86.1	1.6	0.2	0.1	3.0	0.5	0.3	0.1	4.9	1.3	3.3	0.3	6.1
All Men	73,112	32,250	77.3	74.7	0.8	0.2	0.1	4.0	0.7	1.6	0.4	2.9	0.9	1.7	0.4	18.3
Age																
18-24 years	12,396	5,267	64.4	63.6	0.1 *	0.4	0.1 *	2.8	0.2 *	1.9	0.1 *	1.1	0.8	0.3	0.5	32.1
25-44 years	38,647	16,780	78.5	77.1	0.3	0.1	0.1 *	2.7	0.3	1.5	0.3	1.5	0.5	0.9	0.4	18.4
45-64 years	22,069	10,203	83.2	76.7	2.0	0.2	0.2	6.8	1.5	1.7	0.6	6.2	1.9	3.8	0.5	10.4
Race																
White	62,664	27,278	79.7	76.9	0.8	0.1	0.1	3.4	0.6	1.2	0.3	2.8	0.9	1.7	0.3	16.9
Black	7,900	3,928	62.6	60.0	0.8	0.3 *	0.1 *	8.2	1.5	4.2	0.9	3.3	1.6	1.3	1.2	27.8
Other	2,549	1,044	68.6	66.6	0.4 *	0.2 *	0.0 †	5.5	0.2 *	4.5	0.1 *	2.4	1.0 *	1.3	1.4 *	24.2
Ethnicity																
Hispanic	3,844	2,513	53.8	52.0	0.4 *	0.3 *	0.1 *	5.3	0.6	3.1	0.6	1.8	0.6 *	0.9	1.0	40.1
Non-Hispanic	67,269	29,737	79.6	76.6	0.8	0.2	0.1	3.8	0.7	1.5	0.4	3.0	1.0	1.7	0.4	16.4
Education																
Less than 12 years	13,576	6,139	56.2	52.7	1.8	0.3	0.2	11.6	2.1	5.4	1.3	2.2	0.8	1.0	0.6	33.4
12 years	27,052	11,962	76.5	73.8	0.7	0.2	0.1 *	3.2	0.5	1.3	0.2	2.9	1.0	1.7	0.5	19.8
Some college	15,275	6,633	83.5	80.7	0.2	0.1 *	0.1 *	1.3	0.2 *	0.5	0.1 *	3.8	1.3	2.4	0.5	13.9
College graduate	16,786	7,321	91.6	89.2	0.6	0.0 *	0.0	1.2	0.2	0.1 *	0.1 *	2.4	0.6	1.7	0.1 *	7.2
Unknown	424	195	45.7	41.8	1.0 *	1.1 *	1.4 *	15.5	2.0 *	6.6 *	3.4 *	1.9 *	1.4 *	0.4 *	0.4 *	40.3
Age & Education																
18-24 years &																
Less than 12 years	2,891	1,262	45.1	43.9	0.2 *	0.6 *	0.1 *	6.4	0.5 *	4.6	0.3 *	0.9	0.6 *	0.3 *	0.7 *	48.2
12 years	5,268	2,242	62.0	61.2	0.0 *	0.4 *	0.0	2.3	0.1 *	1.6	0.2 *	1.2	0.9	0.3 *	0.6	34.7
Some college	3,342	1,391	80.2	79.6	0.1 *	0.1 *	0.0	0.5 *	0.0 †	0.2 *	0.0 †	1.3	0.9 *	0.3 *	0.4 *	18.2
College graduate	843	347	84.4	83.8	0.5 *	0.0 †	0.0 †	0.5 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.3 *	15.3
Unknown	52	25	41.8	28.7	3.8 *	5.4 *	3.8 *	25.9 *	0.0 †	12.8 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	45.4

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and: Medicare[1] Only (%)	Private insurance and: Medicaid[1] Only (%)	Private insurance and: Medicare & Medicaid[1] Only (%)	Medicare and/or Medicaid: With Either (%)	Medicare and/or Medicaid: Medicare[1] Only (%)	Medicare and/or Medicaid: Medicaid[1] Only (%)	Medicare and/or Medicaid: Medicare & Medicaid[1] Only (%)	Military: With Military (%)	Military: Military Only (%)	Military: Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
25-44 years &																
Less than 12 years	5,187	2,271	50.1	48.7	0.6 *	0.2 *	0.2 *	9.8	1.1	6.2	1.3	0.9	0.3 *	0.3 *	0.3 *	40.4
12 years	14,079	6,164	76.6	75.2	0.3	0.2 *	0.0	2.4	0.3	1.3	0.2 *	1.6	0.6	0.9	0.5	20.4
Some college	8,555	3,681	83.6	81.9	0.1 *	0.0 *	0.0	1.1	0.1 *	0.6	0.1 *	2.4	0.6	1.6	0.6	14.2
College graduate	10,630	4,575	91.3	90.3	0.2 *	0.0 †	0.0	0.7	0.1 *	0.1 *	0.1 *	1.1	0.3	0.7	0.1 *	7.8
Unknown	197	89	40.9	37.9	0.0 †	1.0 *	2.0 *	15.5	2.3 *	7.0 *	3.2 *	0.0 †	0.0 †	0.0 †	1.0 *	45.7
45-64 years																
Less than 12 years	5,498	2,606	67.7	61.0	3.8	0.2 *	0.3 *	15.9	3.8	5.0	1.9	4.1	1.3	2.0	0.8	19.0
12 years	7,704	3,556	86.3	79.8	1.8	0.2 *	0.2 *	5.2	1.0	1.0	0.3 *	6.7	2.0	4.1	0.6	8.4
Some college	3,378	1,561	86.7	79.0	0.9	0.2 *	0.2 *	2.5	0.5 *	0.2 *	0.1 *	9.9	3.2	6.2	0.5 *	8.7
College graduate	5,313	2,399	93.4	88.0	1.2	0.1 *	0.1 *	2.2	0.3 *	0.0 *	0.0 *	5.5	1.3	3.8	0.2 *	4.5
Unknown	175	81	52.4	50.1	1.2 *	0.0 †	0.0 †	12.5 *	2.3 *	4.3 *	4.7 *	4.6 *	3.5 *	1.1 *	0.0 †	32.8
Marital Status																
Married	48,774	21,630	83.9	80.6	0.9	0.1	0.1	3.2	0.5	1.1	0.2	3.2	0.9	2.1	0.3	13.0
Widowed	515	249	67.4	61.6	1.5 *	0.0 †	0.0 †	13.9	3.6 *	6.1 *	1.5 *	6.2	1.1 *	3.8	0.6 *	19.0
Divorced	4,481	1,969	65.3	61.8	0.7	0.2 *	0.0	6.5	1.7	2.2	0.8	6.0	2.7	2.5	1.2	25.4
Separated	1,199	555	57.5	55.5	0.7 *	0.1 *	0.0 †	8.2	1.0 *	5.7	0.3 *	3.9	2.2	1.2 *	0.7 *	32.2
Never married	18,039	7,798	64.8	63.5	0.4	0.3	0.2	4.8	0.6	2.4	0.7	1.1	0.7	0.4	0.7	30.0
Unknown	105	49	72.8	66.4	2.6 *	0.0 †	0.0 †	6.6 *	1.6 *	2.3 *	0.0 †	3.7 *	0.0 †	3.7 *	0.0 †	23.2
Employment Status																
Currently employed	62,141	27,259	82.0	80.0	0.2	0.1	0.0	0.8	0.1	0.4	0.0 *	2.2	0.6	1.6	0.3	16.6
Unemployed	2,370	1,049	41.0	39.5	0.0 †	0.4 *	0.0 †	7.1	0.4 *	5.9	0.2 *	3.0	1.7	1.1 *	0.5 *	50.1
Not in labor force	8,601	3,942	55.3	45.7	5.3	0.7	0.6	25.6	4.9	9.3	2.9	7.3	3.0	2.4	1.4	21.8
Employment Status & Age																
Currently employed &																
18-24 years	9,216	3,875	66.5	65.9	0.1 *	0.2 *	0.0	1.1	0.1 *	0.6	0.0 †	0.9	0.7	0.2 *	0.5	31.6
25-44 years	35,503	15,357	82.6	81.4	0.2	0.1	0.0	0.8	0.1 *	0.5	0.0 *	1.3	0.3	1.0	0.3	16.2
45-64 years	17,422	8,027	88.8	84.7	0.3	0.1 *	0.0	0.7	0.1 *	0.1 *	0.0 *	4.9	1.2	3.7	0.3	9.4
Unemployed &																
18-24 years	718	313	39.9	39.0	0.0 †	0.9 *	0.0 †	5.2	0.6 *	3.1 *	0.3 *	0.6 *	0.3 *	0.0 †	0.2 *	55.3
25-44 years	1,199	527	33.2	32.1	0.0 †	0.3 *	0.0 †	8.9	0.2 *	8.0	0.2 *	3.1	2.1 *	0.8 *	0.6 *	55.4
45-64 years	453	209	63.3	59.9	0.0 †	0.0 †	0.0 †	5.2 *	0.5 *	4.8 *	0.0 †	6.3	2.9 *	3.4 *	0.7 *	27.9
Not in labor force &																
18-24 years	2,463	1,079	63.6	61.8	0.2 *	0.8	0.2 *	8.4	0.4 *	6.2	0.6 *	1.6	1.1	0.6 *	0.8 *	27.4
25-44 years	1,945	896	30.8	26.4	2.6	0.5 *	0.7 *	33.2	5.3	16.8	5.2	5.3	2.7	0.5 *	2.3	34.9
45-64 years	4,193	1,967	61.9	45.2	9.5	0.7	0.8	32.3	7.3	7.7	3.3	11.6	4.4	4.3	1.4	12.4
Family Income																
Under $5,000	2,208	968	37.5	36.6	0.4 *	0.2 *	0.0 †	16.9	1.3	12.3	2.0	1.8	0.8 *	0.4 *	0.8 *	44.6
$5,000-$6,999	1,477	664	29.9	28.6	0.2 *	0.5 *	0.3 *	19.9	4.0	12.6	2.0 *	3.0	2.4	0.3 *	2.2 *	46.5
$7,000-$9,999	1,989	942	28.9	26.0	1.6	0.7 *	0.2 *	21.0	4.0	11.0	2.6 *	3.4	2.3	0.3 *	0.9 *	49.6
$10,000-$14,999	5,396	2,438	44.9	42.2	1.7	0.2 *	0.3 *	10.6	2.1	4.6	1.3	2.5	1.5	0.4 *	1.2	44.0
$15,000-$19,999	7,558	3,343	61.8	58.7	1.6	0.2 *	0.2 *	5.8	1.2	1.8	0.5	2.6	1.5	0.9	0.6 *	32.5
$20,000-$24,999	5,730	2,528	77.6	74.5	1.1	0.3 *	0.1 *	3.3	0.4 *	0.8	0.1 *	2.9	1.2	1.3	0.4 *	19.4
$25,000-$34,999	15,186	6,624	84.2	80.9	0.8	0.2 *	0.1 *	2.2	0.4	0.4	0.1 *	3.1	0.8	2.0	0.4	13.7
$35,000-$49,999	17,187	7,575	88.9	86.1	0.4	0.1 *	0.0	0.9	0.1 *	0.1	0.1 *	3.0	0.7	2.2	0.2 *	9.9
$50,000 or more	16,382	7,168	92.9	90.3	0.4	0.0	0.0	0.7	0.1	0.1 *	0.0	2.8	0.6	2.1	0.2 *	6.1

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

					Private insurance and			Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Poverty Level																
Under 0.50	1,880	822	31.5	30.6	0.4 *	0.2 *	0.0 †	17.3	1.0 *	14.5	0.7 *	1.6 *	0.9 *	0.3 *	1.3 *	49.7
0.50 to under 1.00	3,883	1,782	31.6	30.3	0.8 *	0.4 *	0.1 *	19.9	2.8	12.8	2.5	1.7	1.1	0.1 *	1.3	47.3
1.00 to under 1.25	2,733	1,252	44.7	42.3	1.2	0.3 *	0.2 *	9.6	2.0	4.0	1.7	1.5	0.8 *	0.5 *	0.7 *	46.0
1.25 to under 1.50	3,188	1,445	54.0	52.1	0.9	0.2 *	0.2 *	8.0	2.2	2.6	1.0	3.0	1.7	0.5 *	0.6 *	37.1
1.50 to under 1.75	5,254	2,377	69.0	66.2	0.9	0.3 *	0.2 *	4.6	1.1	1.3	0.5	3.1	1.5	1.2	0.6 *	25.9
1.75 to under 2.00	8,612	3,830	79.0	76.9	0.8	0.2 *	0.1 *	2.5	0.5	0.6	0.2 *	2.0	0.8	1.1	0.5	18.2
2.00 and above	47,563	20,742	87.2	84.0	0.7	0.1	0.1	1.7	0.3	0.2	0.1	3.2	0.8	2.2	0.3	11.0
Poverty Level and Age																
18-24 years &																
Under 0.50	828	347	48.1	47.5	0.3 *	0.0 †	0.0 †	9.2	0.0 †	8.8	0.0 †	0.8 *	0.5 *	0.2 *	1.5 *	41.1
0.50 to under 1.00	1,216	536	42.8	41.7	0.2 *	0.7 *	0.0 †	8.0	0.6 *	6.4	0.1 *	0.7 *	0.5 *	0.2 *	1.5 *	48.1
1.00 to under 1.25	707	319	38.7	38.5	0.0 †	0.0 †	0.0 †	2.6 *	0.0 †	2.3 *	0.3 *	0.6 *	0.3 *	0.3 *	0.0 †	58.4
1.25 to under 1.50	707	305	50.0	49.3	0.0 †	0.0 †	0.4 *	3.3 *	0.0 †	2.2 *	0.6 *	0.6 *	0.3 *	0.3 *	0.4 *	46.4
1.50 to under 1.75	1,061	466	53.9	52.4	0.3 *	1.1 *	0.0 †	4.2	1.1 *	1.2 *	0.4 *	1.9 *	1.9 *	0.0 †	0.2 *	41.3
1.75 to under 2.00	1,726	750	67.0	66.7	0.0 †	0.1 *	0.0	1.4 *	0.0 †	0.9 *	0.2 *	1.2	0.9 *	0.1 *	0.7 *	30.1
2.00 and above	6,152	2,544	76.6	75.6	0.1 *	0.4 *	0.1 *	1.0	0.0	0.3 *	0.0 †	1.1	0.7	0.4	0.3 *	22.1
25-44 years &																
Under 0.50	741	326	17.0	16.4	0.0 †	0.3 *	0.0 †	20.1	0.4 *	18.5	0.3 *	1.4 *	0.6 *	0.2 *	0.6 *	62.0
0.50 to under 1.00	1,809	818	29.3	28.1	0.9 *	0.3 *	0.0 †	18.1	1.2 *	13.2	1.9 *	1.4 *	0.8 *	0.0 †	0.9 *	52.1
1.00 to under 1.25	1,477	660	47.6	46.0	0.4 *	0.6 *	0.3 *	7.8	1.6 *	3.4	1.4 *	1.0 *	0.7 *	0.2 *	1.0 *	44.3
1.25 to under 1.50	1,720	770	56.1	55.2	0.3 *	0.1 *	0.3 *	4.7	0.8 *	2.6	0.6 *	1.4	1.0	0.3 *	0.4 *	38.4
1.50 to under 1.75	3,197	1,432	74.3	72.5	0.4 *	0.1 *	0.1 *	2.5	0.5 *	1.1	0.4 *	2.0	0.7 *	1.3	0.7 *	22.3
1.75 to under 2.00	4,983	2,178	82.1	80.8	0.2 *	0.1 *	0.0	1.4	0.2 *	0.5 *	0.2 *	1.5	0.5 *	0.9	0.4 *	16.1
2.00 and above	24,721	10,596	87.1	85.7	0.2	0.0	0.0	0.9	0.2	0.3	0.1 *	1.5	0.4	1.1	0.3	11.7
45-64 years &																
Under 0.50	311	149	22.2	19.3	1.9 *	0.4 *	0.0 †	32.0	5.2 *	20.0	3.4 *	4.2 *	2.5 *	0.6 *	2.3 *	43.3
0.50 to under 1.00	858	428	20.4	18.5	1.3 *	0.1 *	0.2 *	40.6	9.5	21.2	7.3	3.8	2.7	0.2 *	1.7 *	36.3
1.00 to under 1.25	550	273	44.5	37.4	4.9	0.0 †	0.4 *	23.7	5.6	7.9	4.2 *	4.3 *	2.0 *	1.5 *	0.9 *	34.5
1.25 to under 1.50	761	370	52.7	47.7	3.1	0.7 *	0.0 †	19.8	7.5	3.1	2.3 *	9.1	4.9	1.0 *	1.2 *	25.4
1.50 to under 1.75	996	479	68.1	60.5	3.3	0.4 *	0.9 *	11.7	2.6	1.8 *	0.9 *	7.8	3.8	2.3 *	0.8 *	21.0
1.75 to under 2.00	1,903	902	82.0	75.9	3.1	0.2 *	0.3 *	6.5	1.7	0.6 *	0.4 *	4.2	1.7	2.3	0.8 *	12.8
2.00 and above	16,689	7,602	91.2	84.5	1.7	0.1 *	0.1 *	3.2	0.5	0.2	0.1 *	6.5	1.6	4.5	0.3	6.0
All Women	77,197	35,961	76.9	74.7	0.6	0.5	0.1	7.5	0.5	5.3	0.4	2.2	1.2	1.2	0.4	15.3
Age																
18-24 years	13,005	5,746	63.4	61.9	0.1 *	0.6	0.0	9.7	0.1 *	8.6	0.2 *	2.9	2.2	2.2	1.0	24.6
25-44 years	40,147	18,809	78.6	77.2	0.2	0.5	0.1	6.7	0.2	5.3	0.3	1.6	1.0	1.0	0.2	14.3
45-64 years	24,046	11,406	81.3	77.3	1.6	0.5	0.2	7.7	1.1	3.4	0.8	3.0	1.1	1.1	0.3	11.8
Race																
White	64,885	29,223	79.9	77.8	0.7	0.4	0.1	5.8	0.4	3.8	0.4	2.1	1.2	1.2	0.3	14.1
Black	9,578	5,552	59.3	56.7	0.6	1.2	0.1 *	19.0	1.0	15.1	0.9	2.1	1.3	1.3	0.8	21.5
Other	2,734	1,186	67.4	64.4	0.1 *	0.4 *	0.1 *	8.5	0.1 *	7.4	0.3 *	4.6	2.1	2.1	1.4 *	21.3
Ethnicity																
Hispanic	6,274	2,813	54.0	52.3	0.4 *	0.6	0.0 *	14.0	0.5	11.5	0.9	2.0	1.4	0.6 *	0.5	31.2
Non-Hispanic	70,923	33,148	78.9	76.7	0.6	0.5	0.1	6.9	0.5	4.7	0.4	2.2	1.2	1.0	0.4	13.9

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Medicare and/or Medicaid With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Military With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Education																
Less than 12 years	13,605	6,537	51.9	48.8	1.2	1.0	0.3	20.8	1.3	15.5	1.5	1.8	1.0	1.0	0.5	28.3
12 years	32,293	15,059	77.5	75.2	0.6	0.6	0.1	6.6	0.4	4.6	0.3	2.5	1.4	1.4	0.5	15.3
Some college	17,236	7,902	83.5	81.7	0.3	0.3	0.1 *	3.5	0.2	2.3	0.2	2.5	1.4	1.4	0.3	12.0
College graduate	13,798	6,328	92.0	90.8	0.4	0.1 *	0.0	1.1	0.1 *	0.4	0.0 *	1.7	0.9	0.9	0.2	6.3
Unknown	265	135	56.2	47.2	0.9 *	6.3 *	1.9 *	29.4	5.2 *	10.6	4.6 *	0.0 †	0.0 †	0.0 †	0.0 †	23.5
Age & Education																
18-24 years &																
Less than 12 years	2,441	1,116	38.0	36.5	0.0 †	1.2 *	0.0 †	24.3	0.1 *	22.5	0.5 *	1.8	1.6	1.6	0.9	36.4
12 years	5,629	2,504	60.8	59.3	0.1 *	0.8	0.0 †	9.5	0.1 *	8.4	0.0 *	3.4	2.7	2.7	1.2	26.7
Some college	3,928	1,701	77.1	76.0	0.2 *	0.1 *	0.0 †	3.1	0.0 *	2.5	0.1 *	2.9	2.1	2.1	0.8	17.3
College graduate	976	410	85.8	84.3	0.2 *	0.0 †	0.0 †	0.3 *	0.0 †	0.1 *	0.0 †	2.5 *	1.3 *	1.3 *	0.2 *	12.6
Unknown	31	15	74.2	53.9	0.0 †	13.6 *	6.6 *	30.9 *	0.0 †	3.1 *	7.5 *	0.0 †	0.0 †	0.0 †	0.0 †	15.2 *
25-44 years &																
Less than 12 years	5,120	2,452	47.2	45.2	0.4 *	1.0	0.2 *	22.2	0.4 *	19.0	1.1	1.1	0.7	0.7	0.3 *	31.2
12 years	16,072	7,591	77.5	76.0	0.2	0.7	0.1 *	6.8	0.2	5.4	0.2	1.6	1.1	1.1	0.3	15.2
Some college	9,406	4,377	83.9	82.8	0.0 *	0.3	0.1 *	3.5	0.2	2.5	0.2 *	2.0	1.3	1.3	0.1 *	11.7
College graduate	9,402	4,317	92.5	91.7	0.2 *	0.0 *	0.0	0.7	0.0 *	0.4	0.0 †	1.3	0.8	0.8	0.2 *	6.0
Unknown	147	72	59.2	47.1	1.6 *	8.5 *	2.0 *	33.4	3.6 *	14.6 *	3.1 *	0.0 †	0.0 †	0.0 †	0.0 †	19.5
45-64 years																
Less than 12 years	6,044	2,969	61.5	56.8	2.3	0.9	0.4	18.1	2.5	9.6	2.2	2.3	1.1	1.1	0.5 *	22.5
12 years	10,592	4,964	86.4	82.3	1.6	0.3	0.1 *	4.7	0.7	1.5	0.5	3.4	1.3	1.3	0.3 *	9.3
Some college	3,902	1,824	89.2	85.0	1.2	0.4 *	0.2 *	4.1	0.4 *	1.4	0.4 *	3.2	0.8	0.8 *	0.3 *	7.5
College graduate	3,420	1,601	92.5	90.0	1.0	0.1 *	0.0 †	2.1	0.4 *	0.6 *	0.0 *	2.5	1.2	1.2 *	0.1 *	5.2
Unknown	88	48	44.9	44.9	0.0 †	0.0 †	0.0 †	22.2	9.6 *	6.5 *	6.0 *	0.0 †	0.0 †	0.0 †	0.0 †	32.9
Marital Status																
Married	49,978	23,073	83.3	81.2	0.6	0.2	0.0	3.4	0.3	2.1	0.1 *	2.8	1.6	1.6	0.3	12.3
Widowed	2,795	1,358	66.3	61.0	2.8	0.8 *	0.1 *	14.9	3.0	6.3	1.6	4.0	2.4	2.4	0.4 *	19.8
Divorced	7,030	3,397	66.8	63.1	0.5	0.9	0.1 *	14.5	0.8	10.9	1.3	0.4 *	0.2 *	0.2 *	0.3	19.7
Separated	2,400	1,211	48.8	45.9	0.5 *	1.6	0.2 *	28.9	0.9	24.1	1.7	1.6	1.0 *	1.0	0.7 *	22.8
Never married	14,899	6,877	66.8	64.6	0.4	1.1	0.2	13.0	0.4	10.0	0.8	0.9	0.4	0.4	0.6	21.0
Unknown	94	45	60.2	56.8	0.0 †	2.2 *	1.3 *	11.3 *	0.0 †	5.6 *	2.2 *	0.0 †	0.0 †	0.0 †	0.0 †	31.9
Employment Status																
Currently employed	51,186	23,685	84.2	82.9	0.2	0.3	0.0	1.8	0.1	1.2	0.1	1.9	0.9	0.9	0.3	13.2
Unemployed	2,271	1,090	54.2	52.2	0.0 *	0.9 *	0.2 *	15.0	0.0 †	13.5	0.4 *	3.1	2.2	2.2	0.5 *	29.2
Not in labor force	23,740	11,186	63.2	59.2	1.6	1.0	0.2	19.0	1.4	13.3	1.2	2.9	1.8	1.8	0.6	18.4
Employment Status & Age																
Currently employed &																
18-24 years	8,430	3,662	72.3	71.4	0.1 *	0.2 *	0.0 †	2.4	0.1 *	2.0	0.0 *	2.5	1.9	1.9	0.8	23.0
25-44 years	28,782	13,417	85.7	84.7	0.1	0.3	0.0	1.9	0.1 *	1.3	0.1 *	1.3	0.7	0.7	0.2	11.9
45-64 years	13,974	6,606	88.3	86.0	0.3	0.3	0.0	1.4	0.1 *	0.5	0.1 *	2.5	0.8	0.8	0.2 *	9.9
Unemployed &																
18-24 years	666	304	43.9	42.2	0.0 †	1.3 *	0.0 †	19.7	0.0 †	18.2	0.2 *	2.6 *	2.2 *	2.2	1.5 *	34.1
25-44 years	1,201	582	56.0	54.5	0.1 *	0.9 *	0.2 *	15.8	0.0 †	14.4	0.2 *	2.2 *	1.8 *	1.8	0.2 *	27.3
45-64 years	405	204	65.7	61.9	0.0 †	0.0 †	0.6 *	4.9	0.0 †	2.8 *	1.5 *	6.5	3.2 *	3.2 *	0.0 †	26.7

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With Private Only (%)	Private insurance and: Medicare Only (%)	Private insurance and: Medicaid Only (%)	Private insurance and: Medicare & Medicaid Only (%)	Medicare and/or Medicaid: With Either (%)	Medicare and/or Medicaid: Medicare Only (%)	Medicare and/or Medicaid: Medicaid Only (%)	Medicare and/or Medicaid: Medicare & Medicaid Only (%)	Military: With Military (%)	Military: Military Only (%)	Military: Military & Private Only (%)	Undefined: Plans Only (%)	Undefined: Not Insured (%)
Not in labor force &																
18-24 years	3,909	1,780	47.4	45.0	0.2 *	1.4	0.1 *	23.7	0.1 *	21.4	0.4 *	3.6	2.7	2.7	1.2	26.5
25-44 years	10,164	4,810	61.0	58.8	0.4	1.2	0.2 *	19.2	0.8	15.6	1.0	2.1	1.8	1.8	0.4	19.5
45-64 years	9,667	4,596	71.9	65.3	3.5	0.8	0.3 *	16.9	2.6	7.6	1.8	3.5	1.5	1.5	0.5	14.0
Family Income																
Under $5,000	3,535	1,700	35.0	32.0	0.5 *	1.6	0.4 *	36.3	0.8 *	30.4	2.5	2.0	1.3 *	0.5 *	0.9	28.9
$5,000-$6,999	2,212	1,053	29.5	26.0	1.2	1.9	0.0 †	39.8	3.0	30.7	3.0	1.1 *	0.7 *	0.4 *	0.6 *	32.5
$7,000-$9,999	3,106	1,562	32.6	29.8	0.8	1.6	0.1 *	32.7	1.6	26.8	1.9	1.4	1.0	0.3 *	0.6 *	35.5
$10,000-$14,999	6,902	3,305	51.7	48.9	1.4	1.0	0.2 *	14.1	0.9	9.9	0.6	2.0	1.9	0.1 *	0.7	34.3
$15,000-$19,999	8,759	4,165	68.1	65.7	1.0	0.8	0.2 *	7.6	0.7	4.4	0.5	2.0	1.7	0.3	0.5	24.2
$20,000-$24,999	6,176	2,867	79.2	77.0	0.6	0.5	0.0	4.4	0.5 *	2.6	0.2 *	3.4	2.2	1.2	0.5 *	14.8
$25,000-$34,999	14,958	6,880	86.1	83.9	0.7	0.2	0.1 *	2.4	0.2	1.0	0.2	2.6	1.2	1.2	0.4	10.9
$35,000-$49,999	16,277	7,478	90.5	88.8	0.3	0.2	0.1	1.3	0.1 *	0.6	0.0	2.2	1.0	1.1	0.1 *	7.6
$50,000 or more	15,271	6,951	94.4	92.5	0.3	0.1 *	0.0	0.8	0.1 *	0.2 *	0.0 †	2.0	0.7	1.4	0.2 *	4.5
Poverty Level																
Under 0.50	3,231	1,575	28.2	25.4	0.4 *	1.9	0.1 *	41.5	0.6 *	37.5	0.9	1.4	0.8 *	0.5 *	0.8	31.0
0.50 to under 1.00	5,661	2,780	31.2	28.8	0.6	1.4	0.2 *	33.9	1.6	27.5	2.6	1.5	1.2	0.2 *	0.8	35.1
1.00 to under 1.25	3,329	1,625	46.3	44.2	0.5 *	1.2	0.1 *	16.5	1.3	12.1	1.2	2.3 *	1.9 *	0.3 *	0.5 *	36.6
1.25 to under 1.50	3,757	1,831	56.9	54.8	0.7	1.1	0.1 *	12.1	1.1	8.2	0.9	2.5	2.0	0.4 *	0.8	30.0
1.50 to under 1.75	5,458	2,596	71.5	69.0	0.9	0.9	0.2 *	6.5	0.3 *	3.8	0.4 *	2.4	1.9	0.5 *	0.3 *	21.8
1.75 to under 2.00	8,971	4,171	80.4	78.5	0.7	0.5 *	0.1 *	3.9	0.5	1.8	0.3 *	2.1	1.4	0.7	0.5	15.1
2.00 and above	46,789	21,383	89.5	87.3	0.6	0.2	0.1	1.8	0.2	0.5	0.1	2.3	1.1	1.2	0.3	8.4
Poverty Level and Age																
18-24 years &																
Under 0.50	1,290	590	47.4	45.5	0.2 *	0.7 *	0.0 †	25.6	0.0 †	24.4	0.1 *	2.6 *	1.4 *	1.0 *	1.1 *	25.3
0.50 to under 1.00	1,564	712	37.6	36.9	0.0 †	0.3 *	0.0 †	24.9	0.2 *	24.0	0.3 *	2.2	1.8	0.4 *	1.3 *	34.7
1.00 to under 1.25	822	374	39.5	38.5	0.0 †	1.0 *	0.0 †	18.7	0.3 *	16.8	0.2 *	3.6 *	3.3 *	0.0 †	0.0 †	39.5
1.25 to under 1.50	799	378	50.0	48.6	0.2 *	1.2 *	0.0 †	13.6	0.0 †	11.9	0.3 *	3.9	3.9	0.0 †	1.5 *	32.6
1.50 to under 1.75	1,018	460	54.5	52.5	0.0 †	1.4 *	0.2 *	7.6	0.0 †	6.0	0.0 †	3.6 *	3.2 *	0.4 *	1.0 *	35.3
1.75 to under 2.00	1,726	756	71.0	69.5	0.3 *	0.4 *	0.0 †	4.2	0.1 *	3.2	0.1 *	3.1	2.0	0.9 *	1.2 *	22.2
2.00 and above	5,785	2,476	78.4	77.0	0.2 *	0.5 *	0.0 †	2.3	0.0	1.4	0.1 *	2.6	1.9	0.7	0.8	17.3
25-44 years &																
Under 0.50	1,494	744	14.0	10.6	0.1 *	3.0	0.1 *	55.6	0.9 *	50.4	1.1 *	0.4 *	0.3 *	0.1 *	0.6 *	32.8
0.50 to under 1.00	2,665	1,338	28.2	25.8	0.2 *	2.0	0.1 *	35.2	0.9 *	30.1	1.9	1.2 *	1.1 *	0.1 *	0.6 *	37.3
1.00 to under 1.25	1,690	829	49.9	48.2	0.1 *	1.2 *	0.2 *	14.8	0.8 *	11.7	0.9 *	1.7 *	1.5 *	0.2 *	0.3 *	35.0
1.25 to under 1.50	1,918	919	60.2	58.5	0.3 *	1.2	0.1 *	9.0	0.5 *	6.5	0.4 *	1.5 *	1.4 *	0.1 *	0.3 *	30.7
1.50 to under 1.75	3,333	1,590	77.3	75.9	0.5 *	0.6 *	0.1 *	4.5	0.0 †	3.2	0.2 *	2.3	2.0	0.4 *	0.0	17.2
1.75 to under 2.00	5,272	2,470	84.2	83.0	0.2 *	0.4 *	0.1 *	2.3	0.1 *	1.3	0.3 *	1.8	1.3	0.5	0.4 *	12.5
2.00 and above	23,775	10,919	90.7	89.7	0.2	0.1	0.1	0.9	0.1	0.4	0.0	1.5	0.8	0.7	0.2	7.8

TABLE 1. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Sociodemographic Characteristics, by Gender: United States, 1989

					Private insurance and			Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
45-64 years &																
Under 0.50	447	241	20.6	16.3	1.9 *	2.0 *	0.0 †	40.5	1.7 *	32.0	2.9 *	1.5 *	1.1 *	0.4 *	0.2 *	41.5
0.50 to under 1.00	1,432	730	29.8	25.6	1.8	1.4 *	0.8 *	41.2	4.3	26.2	6.6	1.3 *	0.9 *	0.3 *	0.5 *	31.6
1.00 to under 1.25	817	422	45.7	41.8	2.0 *	1.4 *	0.0 †	17.9	3.4 *	8.2	2.8	2.1 *	1.3 *	0.6 *	1.4 *	37.0
1.25 to under 1.50	1,040	534	56.1	52.5	1.8 *	0.6 *	0.1 *	16.8	2.9	8.5	2.4 *	3.3	1.8 *	1.1 *	1.2 *	26.6
1.50 to under 1.75	1,108	546	69.7	63.7	2.9	1.4 *	0.6 *	11.2	1.5 *	3.4	1.3 *	1.5 *	0.5 *	1.0 *	0.3 *	23.3
1.75 to under 2.00	1,973	945	78.3	74.1	2.1	0.7 *	0.3 *	7.8	2.0	2.0	0.7 *	2.0	1.0 *	1.0 *	0.4 *	15.8
2.00 and above	17,229	7,988	91.5	87.6	1.4	0.2	0.1 *	2.8	0.5	0.4	0.1 *	3.4	1.1	2.1	0.2	6.2

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE B-1.
[1] Excluding military.
* Estimate has low statistical reliability (relative standard error > 30%).
† Estimate is exactly 0 or standard error is indeterminate.

TABLE 2. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and: Medi-care[1] Only (%)	Medi-caid[1] Only (%)	Medicare & Medicaid[1] Only (%)	Medicare and/or Medicaid: With Either (%)	Medi-care[1] Only (%)	Medi-caid[1] Only (%)	Medicare & Medicaid[1] Only (%)	Military: With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined Plans[1] Only (%)	Not Insured (%)
Total	150,309	68,211	77.2	74.7	0.7	0.3	0.1	5.8	0.6	3.5	0.4	2.5	1.1	1.3	0.4	16.7
Health Status																
Excellent	57,392	25,595	82.7	81.1	0.2	0.2	0.0 *	2.0	0.1	1.4	0.1	2.1	0.9	1.2	0.3	14.5
Very good	44,376	20,088	80.9	79.0	0.3	0.3	0.0 *	3.5	0.3	2.3	0.2	2.3	1.0	1.2	0.3	15.0
Good	34,491	15,846	71.8	69.2	0.6	0.5	0.1	7.0	0.6	4.8	0.4	2.7	1.2	1.4	0.5	20.7
Fair	10,016	4,742	60.1	53.9	3.2	0.7	0.3	19.7	2.0	11.0	1.9	4.0	1.7	1.8	0.9	22.1
Poor	3,554	1,713	43.4	30.6	7.7	1.9	1.0	44.4	7.7	18.4	5.1	7.1	2.9	1.5	0.5 *	20.1
Unknown	480	227	64.2	63.3	0.0 †	0.4 *	0.0 †	9.0	0.4 *	8.1 *	0.0 †	0.9 *	0.4 *	0.5 *	0.4 *	26.4
Major Activity																
Unable to perform major activity	6,772	3,226	47.7	34.1	8.0	1.8	1.4	43.1	7.9	15.8	5.8	6.7	2.8	1.5	1.0	17.4
Limited in amount/kind of major activity	7,498	3,465	69.2	62.7	2.0	1.1	0.3	12.7	1.4	6.5	1.2	4.9	1.5	3.2	0.6	19.4
Limited in other activity	5,490	2,540	73.0	69.1	1.0	0.5	0.2 *	11.2	1.0	7.4	0.9	3.7	1.4	2.1	0.1 *	16.1
Not limited in activity	130,549	58,980	79.3	77.7	0.2	0.2	0.0 *	3.2	0.1	2.5	0.1	2.1	1.0	1.1	0.4	16.6
Work Activity																
Unable to work	7,980	3,818	47.5	34.3	8.0	1.9	1.2	43.5	7.3	17.3	5.7	6.2	2.6	1.5	0.9	17.3
Limited in amount/kind of work	6,776	3,106	71.7	66.3	1.0	0.8	0.3	8.5	0.8	4.8	0.6	5.0	1.6	3.2	0.5	19.8
Limited in other activity	5,004	2,307	75.5	71.5	0.9	0.5 *	0.2 *	8.8	1.2	5.1	0.8	3.8	1.3	2.4	0.3 *	15.8
Not limited in activity	130,549	58,980	79.3	77.7	0.2	0.2	0.0 *	3.2	0.1	2.5	0.1	2.1	1.0	1.1	0.4	16.6
Basic Life Activities																
Needs help in self care (ADL)	780	370	45.9	21.2	14.5	4.3	2.9 *	61.6	9.5	20.8	7.9	5.7	1.1 *	2.8 *	1.3 *	12.1
Needs help in routine activities (IADL)	2,210	1,067	49.4	35.6	7.8	2.8	1.6	47.5	8.2	18.8	6.6	4.8	2.4	0.8 *	0.3 *	13.5
Not limited in basic life activities	147,320	66,774	77.8	75.6	0.5	0.3	0.1	4.9	0.4	3.2	0.3	2.5	1.1	1.3	0.4	16.8
Work Activity & Basic Life Activities																
Unable to work &																
Needs help in self care (ADL)	680	325	44.8	18.4	15.6	4.9	2.8 *	64.9	10.3	20.4	8.8	5.8	0.9 *	2.8 *	0.6 *	12.4
Needs help in routine activities (IADL)	1,644	800	44.6	28.8	9.9	2.8	1.6	54.3	9.0	20.6	8.4	5.5	2.7	0.7 *	0.2 *	13.3
Not limited in basic life activities	5,656	2,693	48.6	37.8	6.5	1.2	0.9	37.8	6.4	16.0	4.5	6.4	2.7	1.5	1.1	19.1
Limited in amount/kind of work &																
Needs help in self care (ADL)	59	25	57.3	40.3 *	9.2 *	0.0 †	3.3 *	37.5	0.0 †	21.8 *	3.3 *	4.5 *	0.0 †	4.5 *	7.1 *	10.6 *
Needs help in routine activities (IADL)	355	167	65.5	57.8	1.9 *	1.8 *	1.7 *	23.8	4.6 *	11.3	1.9 *	3.6 *	1.3 *	1.7 *	0.0 †	15.4
Not limited in basic life activities	6,362	2,914	72.2	67.0	0.9	0.7	0.2 *	7.4	0.6	4.3	0.5	5.1	1.7	3.3	0.5	20.2
Limited in other activity &																
Needs help in self care (ADL)	40	19	45.1	36.6 *	3.5 *	0.0 †	5.0 *	43.3	9.7 *	25.1 *	0.0 †	5.4 *	5.4 *	0.0 †	5.2 *	9.5 *
Needs help in routine activities (IADL)	201	94	60.8	52.2	2.3 *	5.1 *	1.2 *	33.6	7.2 *	17.9	0.0 †	2.1 *	2.1 *	0.0 †	1.0 *	11.1 *
Not limited in basic life activities	4,763	2,194	76.3	72.6	0.8	0.3 *	0.1 *	7.4	0.9	4.3	0.8	3.8	1.2	2.5	0.3 *	16.0
Not limited in activity &																
Needs help in self care (ADL)	1 *	1	100.0 †	100.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	10 *	6	24.5 *	24.5 *	0.0 †	0.0 †	0.0 †	50.4 *	10.6 *	18.5 *	21.3 *	0.0 †	0.0 †	0.0 †	0.0 †	25.2 *
Not limited in basic life activities	130,538	58,973	79.3	77.7	0.2	0.2	0.0 *	3.2	0.1	2.5	0.1	2.1	1.0	1.1	0.4	16.6

TABLE 2. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Medicare and/or Medicaid With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Military With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Work Activity & Health Status																
Unable to work &																
Excellent	369	172	60.4	50.5	4.4 *	2.1 *	2.3 *	25.9	4.0 *	7.6	5.1 *	2.2 *	0.7 *	1.1 *	0.5 *	21.3
Very good	669	304	56.5	48.3	2.9 *	1.8 *	1.0 *	30.8	6.8	10.3	5.7	5.7	1.7 *	1.6 *	1.8 *	15.8
Good	1,874	879	52.5	42.3	5.3	2.0	1.4 *	33.0	5.9	12.9	5.0	4.7	2.7	1.5 *	0.5 *	20.0
Fair	2,537	1,234	48.1	33.1	9.7	1.3 *	1.1	45.9	6.4	19.8	5.5	6.2	2.2 *	2.0	1.1	15.7
Poor	2,490	1,208	39.0	23.3	10.2	2.3	1.2	54.9	9.9	21.2	6.6	8.0	3.3	1.0 *	0.7 *	16.8
Unknown	40 *	21	29.2 *	29.2 *	0.0 †	0.0 †	0.0 †	41.8 *	5.3 *	36.5 *	0.0 †	5.3 *	5.3 *	0.0 †	5.3 *	18.4 *
Limited in amount/kind of work &																
Excellent	779	351	73.0	66.9	0.2 *	0.9 *	1.1 *	8.3	0.8 *	4.7	0.5 *	5.2	1.3 *	3.9	0.7 *	18.9
Very good	1,534	687	78.5	74.4	0.7 *	0.3 *	0.2 *	5.8	0.7 *	2.9	0.8 *	4.4	1.6 *	2.7	0.2 *	15.4
Good	2,480	1,129	72.0	66.2	0.9 *	1.1	0.1 *	8.7	0.9 *	4.9	0.5 *	5.6	1.7	3.6	0.6 *	19.2
Fair	1,587	747	65.8	60.5	1.6 *	0.8 *	0.3 *	10.4	0.5 *	6.5	0.6 *	4.1	1.4	2.6	0.8 *	24.2
Poor	375	180	64.8	57.5	1.9 *	0.0 †	1.1 *	11.0	1.3 *	5.5 *	1.2 *	7.1	2.9 *	4.3 *	0.0 †	24.3
Unknown	21 *	12	53.1	44.0 *	0.0 †	9.1 *	0.0 †	9.1 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	46.9 *
Limited in other activity &																
Excellent	823	369	82.9	79.2	0.2 *	0.3 *	0.2 *	2.6 *	0.3 *	1.6 *	0.0 †	5.1	2.1 *	3.0 *	0.3 *	12.9
Very good	1,441	646	83.3	78.3	0.8 *	0.9 *	0.1 *	5.1	0.8 *	2.1	0.1 *	4.5	1.2 *	3.2	0.1 *	12.1
Good	1,637	767	75.0	72.2	0.4 *	0.4 *	0.1 *	8.3	1.0 *	5.9	0.5 *	2.6	0.8 *	1.8	0.3 *	16.5
Fair	849	400	63.5	59.6	2.3 *	0.0 †	0.0 †	14.3	1.3 *	8.1	2.3 *	3.3	1.4 *	1.6 *	0.8 *	22.3
Poor	235	117	48.2	41.2	1.6 *	2.2 *	1.1 *	36.7	8.6 *	18.5	4.3 *	4.3 *	1.7 *	2.1 *	0.0 †	18.2
Unknown	18	8	67.1	67.1	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	32.9 *
Not limited in activity &																
Excellent	55,420	24,703	83.0	81.5	0.2	0.2	0.0 *	1.7	0.1	1.3	0.0	2.0	0.9	1.1	0.3	14.4
Very good	40,733	18,451	81.3	79.7	0.3	0.2	0.0 *	2.9	0.1	2.2	0.1	2.1	1.0	1.1	0.3	15.0
Good	28,501	13,071	72.8	71.0	0.3	0.3	0.0 *	5.1	0.2	4.3	0.1	2.3	1.0	1.2	0.5	21.1
Fair	5,043	2,361	63.7	61.2	0.5 *	0.4 *	0.0 *	10.3	0.3 *	8.5	0.4 *	3.0	1.5	1.5	0.8 *	24.7
Poor	453	208	47.4	42.5	1.8 *	0.8 *	0.4 *	18.3	0.5 *	13.6	0.6 *	3.5 *	1.3 *	1.8 *	0.0 †	36.1
Unknown	399	186	68.2	67.6	0.0 †	0.0 †	0.0 †	6.0 *	0.0 †	6.0 *	0.0 †	0.5 *	0.0 †	0.5 *	0.0 †	25.8
All Men	73,112	32,250	77.5	74.7	0.8	0.2	0.1	4.0	0.7	1.6	0.4	2.9	0.9	1.7	0.4	18.3
Health Status																
Excellent	30,711	13,376	82.4	80.8	0.2	0.1	0.0 *	0.9	0.1 *	0.5	0.1	2.0	0.7	1.4	0.3	16.0
Very good	21,151	9,325	80.8	78.7	0.3	0.2	0.0 *	2.0	0.3	1.0	0.1 *	2.4	0.7	1.6	0.3	16.7
Good	15,155	6,736	71.7	68.6	0.7	0.2	0.1 *	4.3	0.7	2.1	0.4	3.2	1.1	2.0	0.6	23.3
Fair	4,131	1,895	59.9	51.7	4.1	0.3 *	0.4 *	17.8	2.8	6.6	2.2	6.5	2.4	2.8	1.3	24.1
Poor	1,754	818	45.4	29.2	10.1	1.5 *	0.8 *	44.3	9.6	13.1	4.1	11.6	4.4	2.2	0.8 *	19.2
Unknown	212	100	57.8	56.8	0.0 †	0.0 †	0.0 †	8.6 *	0.0 †	8.6 *	0.0 †	2.0 *	1.0 *	1.0 *	1.0 *	31.6
Major Activity																
Unable to perform major activity	3,801	1,774	46.1	29.9	10.2	1.5	1.2	45.0	9.6	12.9	5.6	9.8	4.1	1.8	1.4	17.7
Limited in amount/kind of major activity	3,394	1,511	70.4	62.8	1.4	0.4 *	0.3 *	7.9	1.3	3.2	0.8	7.8	2.0	5.4	0.6 *	21.2
Limited in other activity	2,232	988	79.6	74.7	0.5 *	0.0	0.2 *	5.0	0.8 *	2.8	0.3 *	5.6	1.2	4.1	0.1 *	14.9
Not limited in activity	63,685	27,977	79.7	78.0	0.2	0.1	0.0 *	1.3	0.1	0.8	0.0	2.1	0.7	1.4	0.4	18.3

TABLE 2. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Medicare and/or Medicaid With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Military With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Work Activity																
Unable to work	3,867	1,807	45.5	29.5	10.3	1.4	1.2	46.0	9.8	13.6	5.8	9.9	4.0	1.8	1.4	17.3
Limited in amount/kind of work	3,291	1,463	70.9	63.4	1.3	0.4 *	0.4 *	7.3	1.1 *	3.3	0.6 *	7.7	2.0	5.4	0.6 *	21.4
Limited in other activity	2,270	1,003	80.5	75.4	0.5 *	0.2 *	0.2 *	3.3	0.8 *	1.3	0.2 *	5.7	1.3	4.2	0.2 *	15.5
Not limited in activity	63,685	27,977	79.7	78.0	0.2	0.1	0.0 *	1.3	0.1	0.8	0.0	2.1	0.7	1.4	0.4	18.3
Basic Life Activities																
Needs help in self care (ADL)	365	172	48.2	18.3	19.5	4.1 *	2.9 *	66.7	13.7	13.3	10.6	7.4	1.7 *	3.0 *	1.9 *	8.4
Needs help in routine activities (IADL)	812	385	43.1	25.6	11.1	2.4 *	1.2 *	55.7	13.5	15.7	7.8	9.7	4.8	1.0 *	0.1 *	12.8
Not limited in basic life activities	71,935	31,693	78.0	75.5	0.6	0.1	0.1	3.1	0.4	1.4	0.2	2.8	0.9	1.7	0.4	18.4
Work Activity & Basic Life Activities																
Unable to work &																
Needs help in self care (ADL)	331	156	47.9	17.0	20.5	4.5 *	2.0 *	68.9	15.1	12.8	11.1	7.5 *	1.3 *	3.3 *	0.9 *	8.7
Needs help in routine activities (IADL)	663	318	39.8	20.9	12.5	2.7 *	1.2 *	60.3	13.6	16.9	9.0	10.7	5.5	0.7 *	0.1 *	12.4
Not limited in basic life activities	2,872	1,333	46.5	32.9	8.6	0.8	1.1	40.0	8.2	12.9	4.5	9.9	4.0	2.0	1.8	19.4
Limited in amount/kind of work &																
Needs help in self care (ADL)	23 *	10	46.2 *	29.4 *	8.1 *	0.0 †	8.7 *	43.5 *	0.0 †	18.1 *	8.6 *	0.0 †	0.0 †	0.0 †	18.4 *	8.7 *
Needs help in routine activities (IADL)	119	52	56.3	43.4	4.2 *	1.8 *	1.7 *	37.9	11.9 *	13.0 *	3.5 *	5.2 *	0.0 †	3.3 *	0.0 †	15.4 *
Not limited in basic life activities	3,150	1,401	71.6	64.4	1.1	0.3 *	0.3 *	5.8	0.7 *	2.8	0.4 *	7.8	2.0	5.5	0.5 *	21.7
Limited in other activity &																
Needs help in self care (ADL)	10 *	5	58.3 *	24.3 *	14.1 *	0.0 †	19.9 *	54.3 *	0.0 †	20.4 *	0.0 †	21.3 *	21.3 *	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	29	14	68.1	60.3	7.8 *	0.0 †	0.0 †	26.1 *	18.3 *	0.0 †	0.0 †	6.6 *	6.6 *	0.0 †	0.0 †	7.0 *
Not limited in basic life activities	2,231	984	80.8	75.8	0.3 *	0.2 *	0.1 *	2.7	0.6 *	1.2 *	0.2 *	5.7	1.2	4.3	0.2 *	15.7
Not limited in activity &																
Needs help in self care (ADL)	1 *	1	100.0 †	100.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	1 *	1	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	100.0 †
Not limited in basic life activities	63,682	27,975	79.7	78.0	0.2	0.1	0.0 *	1.3	0.1	0.8	0.0	2.1	0.7	1.4	0.4	18.3
Work Activity & Health Status																
Unable to work &																
Excellent	213	99	62.0	50.2	4.7 *	3.2 *	2.0 *	27.5	5.8 *	4.1 *	7.0 *	3.9 *	1.2 *	2.0 *	0.9 *	18.3
Very good	327	144	52.4	44.2	2.4 *	1.7 *	0.0 †	32.7	6.6 *	12.5	5.8 *	8.1 *	1.7 *	2.7 *	3.7 *	15.0
Good	848	394	48.5	36.2	7.2	1.6 *	1.3 *	35.9	8.4	10.7	5.5	6.7	4.2	1.7 *	1.2 *	20.8
Fair	1,179	555	44.9	26.0	13.0	0.7 *	1.1 *	48.8	8.9	14.6	6.3	10.8	4.2 *	2.4 *	1.3 *	17.4
Poor	1,275	602	40.0	21.1	12.9	1.6 *	1.0 *	56.6	13.1	15.9	5.5	12.6	4.8	1.2 *	1.0 *	15.2
Unknown	25 *	13	22.0 *	22.0 *	0.0 †	0.0 †	0.0 †	38.9 *	0.0 †	38.9 *	0.0 †	8.6 *	8.6 *	0.0 †	8.6 *	21.7 *
Limited in amount/kind of work &																
Excellent	442	195	70.8	62.2	0.4 *	0.9 *	1.4 *	7.6	0.9 *	3.9 *	0.0 †	7.8	2.0 *	5.8 *	1.1 *	21.3
Very good	767	338	78.0	71.7	1.1 *	0.3 *	0.3 *	6.3	1.2 *	2.2 *	0.9 *	6.0	1.4 *	4.3	0.0 †	16.4
Good	1,189	524	71.1	63.6	1.1 *	0.3 *	0.0 †	7.6	1.3 *	3.8	0.5 *	8.8	2.1 *	6.1	0.4 *	20.2
Fair	694	314	63.4	55.9	1.8 *	0.3 *	0.3 *	6.8	0.7 *	3.0 *	0.5 *	7.0	1.8 *	5.1	1.4 *	29.1
Poor	189	87	70.4	60.3	2.8 *	0.0 †	1.0 *	10.2 *	1.2 *	4.1 *	1.1 *	10.5 *	4.3 *	6.2 *	0.0 †	19.0
Unknown	9 *	5	36.5 *	36.5 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	63.5 *

S1

S2

TABLE 2. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and: Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Medicare and/or Medicaid: With Either (%)	Medi-[1] care Only (%)	Medi-[1] caid Only (%)	Medicare &[1] Medicaid Only (%)	Military: With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Limited in other activity &																
Excellent	475	209	85.6	81.0	0.0 †	0.0 †	0.4 *	0.9 *	0.5 *	0.0 †	0.0 †	6.0 *	1.8 *	4.2 *	0.0 †	12.1
Very good	771	329	84.7	78.8	0.9 *	0.0 †	0.0 †	2.1 *	0.9 *	0.2 *	0.0 †	6.0	1.1 *	4.9	0.0 †	13.1
Good	674	304	76.2	71.8	0.0 †	0.0 †	0.3 *	4.8	1.3 *	3.0 *	0.3 *	4.6	0.5 *	4.1	0.4 *	18.4
Fair	280	127	74.3	70.2	1.2 *	0.0 †	0.0 †	3.8 *	0.0 †	0.7 *	1.0 *	5.9 *	2.2 *	2.8 *	1.0 *	20.0
Poor	65	31	66.7	54.5	0.0 †	8.0 *	0.0 †	17.0 *	0.0 †	7.1 *	0.0 †	12.3 *	6.1 *	4.3 *	0.0 †	18.2 *
Unknown	6 *	3	70.4 *	70.4 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	29.6 *
Not limited in activity &																
Excellent	29,581	12,873	82.7	81.3	0.1 *	0.1	0.0 †	0.6	0.1	0.4	0.0	1.9	0.6	1.2	0.3	16.0
Very good	19,286	8,514	81.3	79.5	0.2	0.1 *	0.0 *	1.3	0.1 *	0.8	0.0	2.0	0.6	1.4	0.3	16.9
Good	12,445	5,514	73.1	71.1	0.3	0.1 *	0.0 *	1.8	0.1 *	1.3	0.1 *	2.4	0.8	1.6	0.6	24.1
Fair	1,978	899	65.5	62.8	0.1 *	0.1 *	0.1 *	5.1	0.2 *	3.9	0.6 *	3.9	1.5 *	2.3	1.3 *	26.9
Poor	224	98	49.0	42.1	2.9 *	0.5 *	0.0 †	10.7 *	0.0 †	6.3 *	0.0 †	6.2 *	1.7 *	3.5 *	0.0 †	42.0
Unknown	171	79	63.7	62.4	0.0 †	0.0 †	0.0 †	5.0 *	0.0 †	5.0 *	0.0 †	1.3 *	0.0 †	1.3 *	0.0 †	31.4
All Women	77,197	35,961	76.9	74.7	0.6	0.5	0.1	7.5	0.5	5.3	0.4	2.2	1.2	0.9	0.4	15.3
Health Status																
Excellent	26,682	12,219	83.0	81.5	0.2	0.3	0.0 *	3.2	0.1	2.4	0.0	2.2	1.3	0.9	0.4	12.8
Very good	23,226	10,763	81.0	79.3	0.4	0.4	0.0 *	4.8	0.2	3.5	0.2	2.2	1.3	0.9	0.3	13.4
Good	19,336	9,110	71.8	69.6	0.5	0.7	0.1 *	9.1	0.5	7.0	0.4	2.2	1.2	1.0	0.4	18.7
Fair	5,886	2,847	60.3	55.4	2.5	1.0	0.3 *	21.0	1.4	14.1	1.7	2.3	1.2	1.1	0.6	20.7
Poor	1,800	895	41.5	31.9	5.3	2.2	1.2 *	44.6	5.8	23.6	6.0	2.7	1.4	0.8 *	0.2 *	21.0
Unknown	268	127	69.2	68.5	0.0 †	0.7 *	0.0 †	9.3	0.8 *	7.7 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	22.2
Major Activity																
Unable to perform major activity	2,971	1,452	49.6	39.5	5.2	2.2	1.6	40.7	5.6	19.6	6.1	2.6	1.1	1.1 *	0.5 *	17.1
Limited in amount/kind of major activity	4,104	1,954	68.2	62.5	2.4	1.6	0.4 *	16.7	1.5	9.2	1.5	2.5	1.1	1.3	0.5	17.8
Limited in other activity	3,258	1,552	68.4	65.2	1.4	0.8	0.2 *	15.4	1.2	10.5	1.4	2.4	1.6	0.8 *	0.1 *	16.9
Not limited in activity	66,865	31,003	79.0	77.4	0.3	0.4	0.0 *	5.1	0.2	4.2	0.1	2.2	1.2	0.9	0.4	14.9
Work Activity																
Unable to work	4,113	2,011	49.3	38.8	5.8	2.3	1.3	41.2	4.9	20.9	5.6	2.7	1.2	1.1 *	0.4 *	17.4
Limited in amount/kind of work	3,486	1,643	72.4	69.0	0.8	1.2	0.3 *	9.7	0.5 *	6.3	0.7	2.5	1.3	1.1	0.5 *	18.4
Limited in other activity	2,733	1,304	71.3	68.3	1.2	0.8 *	0.2 *	13.3	1.6	8.2	1.3	2.1	1.2	0.9	0.4 *	16.0
Not limited in activity	66,865	31,003	79.0	77.4	0.3	0.4	0.0 *	5.1	0.2	4.2	0.1	2.2	1.2	0.9	0.4	14.9
Basic Life Activities																
Needs help in self care (ADL)	415	198	43.8	23.7	10.0	4.5 *	3.0 *	57.2	5.8 *	27.3	5.6	4.2 *	0.5 *	2.6 *	0.8 *	15.3
Needs help in routine activities (IADL)	1,397	682	53.0	41.3	6.0	3.1	1.8	42.7	5.0	20.7	5.9	2.0	1.1 *	0.7 *	0.4 *	13.8
Not limited in basic life activities	75,385	35,081	77.5	75.6	0.5	0.4	0.0	6.6	0.4	4.9	0.3	2.2	1.3	0.9	0.4	15.3
Work Activity & Basic Life Activities																
Unable to work &																
Needs help in self care (ADL)	349	169	41.9	19.8	10.9	5.3 *	3.5 *	61.1	5.8 *	27.7	6.6	4.2 *	0.6 *	2.4 *	0.3 *	15.9
Needs help in routine activities (IADL)	981	482	47.9	34.1	8.1	2.9	1.9 *	50.2	5.9	23.1	8.0	2.0 *	0.8 *	0.8 *	0.3 *	13.8
Not limited in basic life activities	2,784	1,360	50.8	42.8	4.4	1.7	0.8 *	35.5	4.5	19.2	4.6	2.8	1.4	1.1 *	0.4 *	18.8
Limited in amount/kind of work &																
Needs help in self care (ADL)	36 *	15	64.2	47.1 *	9.8 *	0.0 †	0.0 †	33.8 *	0.0 †	24.0 *	0.0 †	7.3 *	0.0 †	7.3 *	0.0 †	11.8 *
Needs help in routine activities (IADL)	237	115	70.2	65.0	0.8 *	1.9 *	1.7 *	16.8	0.9 *	10.5	1.1 *	2.8 *	1.9 *	0.9 *	0.0 †	15.4
Not limited in basic life activities	3,213	1,513	72.7	69.5	0.7	1.1	0.2 *	8.9	0.5 *	5.7	0.6 *	2.4	1.3	1.1	0.5 *	18.7
Limited in other activity &																

TABLE 2. Type of Health Insurance Coverage Among Adults Aged 18 to 64, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and: Medi-care[1] Only (%)	Medi-caid[1] Only (%)	Medicare & Medicaid[1] Only (%)	Medicare and/or Medicaid: With Either (%)	Medi-care[1] Only (%)	Medi-caid[1] Only (%)	Medicare & Medicaid[1] Only (%)	Military: With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined Plans[1] Only (%)	Not Insured (%)
Needs help in self care (ADL)	30	14	40.7 *	40.7 *	0.0 †	0.0 †	0.0 †	39.6 *	12.9 *	26.7 *	0.0 †	0.0 †	0.0 †	0.0 †	6.9 *	12.7 *
Needs help in routine activities (IADL)	171	80	59.5	50.8	1.4 *	5.9 *	1.4 *	34.9	5.3 *	20.9	0.0 †	1.3 *	1.3 *	0.0 †	1.2 *	11.8 *
Not limited in basic life activities	2,532	1,210	72.4	69.8	1.2	0.4 *	0.1 *	11.6	1.2	7.1	1.4	2.2	1.2	0.9 *	0.3 *	16.3
Not limited in activity &																
Needs help in self care (ADL)	0	0	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Needs help in routine activities (IADL)	9 *	5	28.1 *	28.1 *	0.0 †	0.0 †	0.0 †	57.9 *	12.1 *	21.2 *	24.5 *	0.0 †	0.0 †	0.0 †	0.0 †	14.0 *
Not limited in basic life activities	66,856	30,998	79.0	77.5	0.3	0.4	0.0 *	5.1	0.2	4.2	0.1	2.2	1.2	0.9	0.4	14.9
Work Activity & Health Status																
Unable to work &																
Excellent	156	73	58.3	50.9	4.1 *	0.6 *	2.7 *	23.7	1.4 *	12.2 *	2.6 *	0.0 †	0.0 †	0.0 †	0.0 †	25.4
Very good	342	160	60.4	52.1	3.4 *	1.9 *	1.9 *	29.0	7.0 *	8.2	5.6	3.5 *	1.8 *	0.5 *	0.0 †	16.5
Good	1,026	485	55.8	47.2	3.8	2.3	1.2 *	30.6	3.8	14.7	4.6	3.0 *	1.5 *	1.3 *	0.0 †	19.4
Fair	1,358	679	50.9	39.3	6.9	1.9 *	1.1 *	43.4	4.2	24.3	4.8	2.3 *	0.6 *	1.6 *	0.9 *	14.2
Poor	1,215	606	38.0	25.7	7.3	3.0	1.3 *	53.2	6.5	26.7	7.7	3.1	1.7	0.7 *	0.4 *	18.4
Unknown	16 *	8	40.7 *	40.7 *	0.0 †	0.0 †	0.0 †	46.3 *	13.6 *	32.7 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	13.0 *
Limited in amount/kind of work &																
Excellent	337	156	75.9	73.1	0.0 †	0.8 *	0.6 *	9.2	0.7 *	5.8 *	1.3 *	1.9 *	0.5 *	1.3 *	0.0 †	15.9
Very good	767	349	79.0	77.2	0.3 *	0.3 *	0.2 *	5.2	0.3 *	3.6	0.6 *	2.8 *	1.8 *	1.0 *	0.3 *	14.4
Good	1,291	605	72.8	68.6	0.8 *	1.8	0.2 *	9.7	0.5 *	5.9	0.4 *	2.7	1.4 *	1.3 *	0.7 *	18.3
Fair	893	433	67.7	64.1	1.3 *	1.2 *	0.3 *	13.2	0.4 *	9.2	0.7 *	1.8 *	1.1 *	0.8 *	0.5 *	20.4
Poor	186	93	59.1	54.7	1.0 *	0.0 †	1.1 *	11.8	1.5 *	7.0 *	1.2 *	3.7 *	1.4 *	2.3 *	0.0 †	29.7
Unknown	12 *	7	66.1 *	49.8 *	0.0 †	16.3 *	0.0 †	16.3 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	33.9 *
Limited in other activity &																
Excellent	349	160	79.3	76.8	0.5 *	0.7 *	0.0 †	4.9 *	0.0 †	3.7 *	0.0 †	3.8 *	2.5 *	1.3 *	0.7 *	13.9
Very good	670	317	81.8	77.7	0.8 *	1.9 *	0.3 *	8.5	0.7 *	4.3	0.3 *	2.9 *	1.3 *	1.3 *	0.3 *	11.0
Good	963	463	74.2	72.5	0.7 *	0.7 *	0.0 †	10.8	0.8 *	8.0	0.6 *	1.3 *	1.0 *	0.2 *	0.2 *	15.2
Fair	569	273	58.2	54.3	2.9 *	0.0 †	0.0 †	19.5	2.0 *	11.8	2.9 *	2.0 *	1.0 *	1.0 *	0.7 *	23.4
Poor	170	86	41.1	36.2	2.2 *	0.0 †	1.5 *	44.3	11.8 *	22.9	5.9 *	1.3 *	0.0 †	1.3 *	0.0 †	18.3
Unknown	12 *	5	65.5 *	65.5 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	34.5 *
Not limited in activity &																
Excellent	25,839	11,830	83.3	81.9	0.2	0.3	0.0 *	2.9	0.1	2.3	0.0	2.2	1.3	0.9	0.4	12.6
Very good	21,447	9,937	81.4	79.9	0.3	0.4	0.0 †	4.3	0.1 *	3.4	0.1 *	2.2	1.2	0.9	0.3	13.4
Good	16,056	7,557	72.7	71.0	0.2 *	0.5	0.0 †	7.6	0.2 *	6.6	0.1	2.2	1.2	1.0	0.4	18.8
Fair	3,065	1,462	62.6	60.2	0.8 *	0.7 *	0.0 †	13.6	0.3 *	11.5	0.3 *	2.5	1.5	0.9	0.5 *	23.2
Poor	229	110	45.8	43.0	0.8 *	1.1 *	0.9 *	25.8	1.1 *	20.8	1.2 *	0.9 *	0.9 *	0.0 †	0.0 †	30.2
Unknown	228	107	71.6	71.6	0.0 †	0.0 †	0.0 †	6.8 *	0.0 †	6.8 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	21.6

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE B-2.
[1] Excluding military.
* Estimate has low statistical reliability (relative standard error > 30%).
† Estimate is exactly 0 or standard error is indeterminate.

TABLE 3. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Sociodemographic Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private %	With[1] Private Only %	Private insurance and: Medi-care[1] Only %	Medi-caid[1] Only %	Medicare & Medicaid[1] Only %	Medicare and/or Medicaid: With Either %	Medi-care[1] Only %	Medi-caid[1] Only %	Medicare & Medicaid[1] Only %	Military: With Military %	Military Only %	Military & Private Only %	Undefined[1] Plans Only %	Not Insured %
Total	64,005	31,524	71.2	69.6	0.1 *	1.1	0.0	12.0	0.1	10.6	0.1 *	2.2	1.6	0.5	0.6	15.8
Age																
0-4 years	18,769	9,146	66.7	65.2	0.1 *	1.1	0.0	15.1	0.1 *	13.7	0.0	2.4	2.1	0.2	0.7	16.7
5-17 years	45,236	22,378	73.1	71.3	0.0	1.1	0.0	10.7	0.1 *	9.3	0.1 *	2.1	1.5	0.6	0.5	15.4
Race																
White	51,612	24,701	75.7	74.3	0.0	0.9	0.0	8.3	0.1 *	7.2	0.0	2.1	1.6	0.4	0.5	14.9
Black	9,959	5,680	51.1	48.2	0.0	2.2	0.1 *	29.3	0.3 *	26.5	0.1 *	2.3	1.6	0.6 *	0.8	19.5
Other	2,434	1,143	58.0	55.9	0.5 *	0.5 *	0.0 †	19.4	0.0 †	18.0	0.4 *	2.8	1.7	1.1 *	1.7 *	20.2
Ethnicity																
Hispanic	7,948	3,744	46.6	45.2	0.0 *	1.0	0.1	18.3	0.2 *	16.8	0.2 *	1.8	1.4	0.3 *	0.7	34.1
Non-Hispanic	56,057	27,780	74.7	73.0	0.1 *	1.1	0.2	11.1	0.1 *	9.7	0.0 *	2.2	1.7	0.5	0.4	13.2
Family Income																
Under $5,000	2,859	1,515	14.7	11.2	0.0 †	3.3	0.1 *	62.7	0.2 *	58.2	0.7 *	0.5 *	0.4 *	0.0 †	0.9 *	24.8
$5,000-$6,999	2,116	1,079	16.3	10.7	0.0 †	4.7 *	0.0 †	55.4	0.0 †	50.3	0.4 *	1.8 *	0.8 *	1.0 *	0.9 *	31.3
$7,000-$9,999	3,273	1,741	21.1	17.4	0.0 †	3.7	0.0 †	49.2	0.3 *	45.2	0.0 †	1.2 *	1.2 *	0.0 †	0.8 *	31.4
$10,000-$14,999	6,162	3,112	38.9	37.0	0.0 †	1.6	0.0 †	21.3	0.0	19.5	0.1 *	2.3	2.0	0.2 *	1.0	38.4
$15,000-$19,999	6,917	3,439	60.1	58.1	0.1 *	1.7	0.0	10.9	0.1 *	8.9	0.0 †	2.9	2.6	0.2 *	1.0	27.2
$20,000-$24,999	5,131	2,542	74.4	73.2	0.0	0.9 *	0.0 †	6.2	0.2 *	4.9	0.0 †	3.7	3.4	0.3 *	0.8 *	16.2
$25,000-$34,999	12,896	6,259	84.2	83.4	0.0	0.3	0.0	2.7	0.1 *	2.2	0.0 †	2.3	1.9	0.4	0.5	11.1
$35,000-$49,999	13,394	6,496	90.9	89.5	0.0	0.5	0.0 †	1.8	0.1 *	1.2	0.0	2.4	1.5	0.9	0.3 *	6.1
$50,000 or more	11,256	5,341	95.3	94.3	0.1 *	0.3 *	0.0 †	0.9	0.1 *	0.4 *	0.0 †	1.2	0.7	0.5 *	0.1 *	3.5
Poverty Level																
Under 0.50	4,433	2,321	13.0	9.3	0.0 †	3.6	0.1 *	61.0	0.3 *	56.4	0.5 *	0.5 *	0.4 *	0.0 †	0.9 *	28.4
0.50 to under 1.00	7,434	3,887	26.0	22.9	0.0 †	2.7	0.0 †	38.1	0.1 *	35.3	0.0	1.6	1.2	0.3 *	0.9	36.5
1.00 to under 1.25	4,476	2,307	52.4	50.4	0.1 *	1.7	0.0 †	15.6	0.1 *	13.4	0.1 *	2.8 *	2.5 *	0.2 *	0.6 *	30.7
1.25 to under 1.50	4,757	2,369	63.8	62.2	0.1 *	1.4	0.0 †	8.8	0.0 †	7.2	0.1 *	2.5	2.3	0.1 *	1.1 *	25.5
1.50 to under 1.75	8,594	4,204	79.1	77.8	0.1 *	0.9	0.1 *	5.5	0.2 *	4.2	0.0	2.9	2.6	0.2 *	0.3 *	13.6
1.75 to under 2.00	11,737	5,692	86.6	85.4	0.1 *	0.5	0.0 †	2.2	0.1 *	1.5	0.0 †	2.3	1.6	0.6	0.5 *	9.7
2.00 and above	22,574	10,744	91.8	90.7	0.0 *	0.4	0.0 †	1.2	0.0	0.8	0.0 †	2.1	1.4	0.8	0.4	5.6
Age and Poverty Level																
0-4 years and																
Under 0.50	1,553	812	9.3	7.3	0.0 †	1.9 *	0.0 †	65.4	0.1 *	63.1	0.3 *	0.9 *	0.9 *	0.0 †	1.5 *	24.8
0.50 to under 1.00	2,348	1,213	22.1	19.6	0.0 †	2.4	0.0 †	42.5	0.1 *	39.9	0.0	1.3 *	1.2 *	0.0	1.4 *	35.3
1.00 to under 1.25	1,348	675	45.6	42.7	0.3 *	2.1 *	0.0 †	20.6	0.2 *	18.0	0.0 †	4.4 *	3.7 *	0.6 *	1.2 *	31.2
1.25 to under 1.50	1,309	648	58.0	55.7	0.3 *	2.0	0.0 †	13.1	0.0 †	10.7	0.0 †	3.5 *	3.4 *	0.0 †	0.6 *	27.1
1.50 to under 1.75	2,205	1,061	76.2	74.8	0.0	1.2	0.1 *	6.2	0.5 *	4.3	0.0 †	2.9	2.9	0.1 *	0.4 *	15.8
1.75 to under 2.00	3,157	1,529	81.9	80.6	0.1 *	0.6 *	0.0 †	3.8	0.1 *	2.9	0.0 †	2.9	2.3	0.5 *	0.5 *	12.2
2.00 and above	6,849	3,208	90.8	90.1	0.0 †	0.4 *	0.0 †	1.6	0.0	1.1	0.0 †	2.0	1.7	0.2 *	0.3 *	6.0
5-17 years and																
Under 0.50	2,880	1,509	15.0	10.4	0.0 †	4.4	0.1 *	58.6	0.4 *	52.8	0.7 *	0.3 *	0.1 *	0.0 †	0.6 *	30.3
0.50 to under 1.00	5,087	2,674	27.8	24.5	0.0 †	2.9	0.0 †	36.1	0.0	33.2	0.0	1.7	1.2	0.5 *	0.6 *	37.1
1.00 to under 1.25	3,128	1,632	55.3	53.6	0.1 *	1.6 *	0.0 †	13.4	0.1 *	11.5	0.1 *	2.0 *	2.0 *	0.0 †	0.4 *	30.5
1.25 to under 1.50	3,448	1,721	66.0	64.7	0.0	1.1	0.0 †	7.2	0.0 †	5.8	0.1 *	2.1 *	1.9 *	0.1 *	1.2 *	24.8
1.50 to under 1.75	6,388	3,143	80.1	78.9	0.1 *	0.7 *	0.0 *	5.2	0.1 *	4.1	0.0	2.8	2.5	0.3 *	0.3 *	12.8
1.75 to under 2.00	8,580	4,163	88.3	87.2	0.1 *	0.4 *	0.0 †	1.7	0.1 *	1.0	0.0 †	2.0	1.4	0.6	0.5 *	8.7
2.00 and above	15,725	7,536	92.3	90.9	0.0	0.3	0.0 †	1.0	0.0	0.6	0.0 †	2.2	1.2	1.0	0.4	5.4

TABLE 3. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Sociodemographic Status, by Gender: United States, 1989

					Private insurance and			Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private %	With[1] Private Only %	Medi-[1] care Only %	Medi-[1] caid Only %	Medicare &[1] Medicaid Only %	With Either %	Medi-[1] care Only %	Medi-[1] caid Only %	Medicare &[1] Medicaid Only %	With Military %	Military Only %	Military & Private Only %	Undefined[1] Plans Only %	Not Insured %
All Boys	32,753	16,040	71.4	69.6	0.1 *	1.2	0.0	11.7	0.1 *	10.3	0.1 *	2.3	1.7	0.6	0.6	15.9
Age																
0-4 years	9,607	4,607	67.2	65.6	0.1 *	1.3	0.0	14.7	0.1 *	13.1	0.1 *	2.4	2.0	0.3	0.7	16.7
5-17 years	23,146	11,433	73.2	71.3	0.1 *	1.2	0.0	10.5	0.1 *	9.1	0.1 *	2.2	1.5	0.7	0.5	15.6
Race																
White	26,471	12,626	76.1	74.6	0.0	0.9	0.0	7.9	0.0	6.8	0.0	2.2	1.6	0.5	0.5	14.8
Black	5,052	2,838	50.7	47.1	0.1 *	2.7	0.1 *	29.8	0.2 *	26.5	0.2 *	2.3	1.4	0.8 *	0.7 *	20.2
Other	1,230	576	55.1	53.2	0.4 *	0.3 *	0.0 †	19.1	0.0 †	18.0	0.3 *	4.2	3.0	1.2 *	2.4 *	21.2
Ethnicity																
Hispanic	3,958	1,874	46.9	45.5	0.0 †	1.1	0.1 *	17.7	0.1 *	16.2	0.3 *	1.8	1.5	0.4 *	0.8	34.4
Non-Hispanic	28,795	14,166	74.8	72.9	0.1	1.2	0.2	10.9	0.1 *	9.5	0.0 *	2.3	1.7	0.6	0.4	13.3
Family Income																
Under $5,000	1,465	762	14.1	10.4	0.0 †	3.4	0.2 *	63.8	0.2 *	59.1	0.8 *	0.1 *	0.1 *	0.0 †	1.0 *	24.8
$5,000-$6,999	948	495	14.7	8.8	0.0 †	4.3 *	0.0 †	55.7	0.0 †	50.9	0.4 *	2.3 *	0.7 *	1.6 *	1.6 *	31.7
$7,000-$9,999	1,668	879	20.3	16.1	0.0 †	4.2	0.0 †	48.3	0.1 *	44.0	0.0 †	1.2 *	1.2 *	0.0 †	0.9 *	33.5
$10,000-$14,999	3,126	1,557	39.9	37.9	0.0 †	1.8	0.0 †	20.7	0.0 †	18.6	0.2 *	2.5 *	2.3 *	0.2 *	0.7 *	38.2
$15,000-$19,999	3,648	1,807	59.7	57.6	0.1 *	1.6	0.1 *	11.5	0.1 *	9.4	0.0 †	2.6	2.3	0.2 *	1.0 *	27.4
$20,000-$24,999	2,527	1,256	75.4	74.1	0.0 †	0.9 *	0.0 †	5.8	0.1 *	4.7	0.0 †	4.0	3.5 *	0.4 *	0.9 *	15.3
$25,000-$34,999	6,710	3,239	83.5	82.5	0.1 *	0.3 *	0.0 †	2.8	0.0	2.3	0.0 †	2.7	2.0	0.6	0.6 *	11.6
$35,000-$49,999	6,845	3,307	91.1	89.3	0.1 *	0.7	0.0 †	1.7	0.0	1.0 *	0.0 †	2.6	1.5	1.1	0.2 *	6.1
$50,000 or more	5,816	2,738	95.3	94.2	0.1 *	0.4 *	0.0 †	0.9	0.0	0.5 *	0.0 †	1.2	0.6 *	0.6 *	0.1 *	3.5
Poverty Level																
Under 0.50	2,191	1,136	12.6	9.1	0.0 †	3.4	0.2 *	60.8	0.2 *	56.4	0.6 *	0.1 *	0.1 *	0.0 †	1.3 *	28.7
0.50 to under 1.00	3,722	1,945	26.3	22.9	0.0 †	2.9	0.0 †	38.1	0.0 †	35.0	0.1 *	1.7	1.2	0.4 *	0.7 *	36.6
1.00 to under 1.25	2,218	1,134	51.1	49.4	0.1 *	1.5 *	0.0 †	15.6	0.1 *	13.8	0.2 *	2.4 *	2.2 *	0.2 *	0.7 *	31.9
1.25 to under 1.50	2,544	1,264	64.5	62.8	0.1 *	1.7	0.0 †	9.6	0.0 †	7.6	0.2 *	2.3 *	2.2 *	0.0 †	0.7 *	24.7
1.50 to under 1.75	4,365	2,124	78.1	76.6	0.1 *	0.9 *	0.0	5.8	0.2 *	4.5	0.0 †	3.2	2.8	0.3 *	0.2 *	14.2
1.75 to under 2.00	6,098	2,941	86.4	85.1	0.1 *	0.5 *	0.0 †	2.0	0.0	1.2	0.0 †	2.5	1.7	0.7	0.7 *	9.8
2.00 and above	11,615	5,496	92.0	90.5	0.0	0.5	0.0 †	1.1	0.0	0.5	0.0 †	2.3	1.4	0.9	0.4	5.7
Age and Poverty Level																
0-4 years and																
Under 0.50	796	417	9.4	7.6	0.0 †	1.8 *	0.0 †	63.9	0.2 *	61.3	0.5 *	0.2 *	0.2 *	0.0 †	2.0 *	26.3
0.50 to under 1.00	1,176	608	24.1	21.1	0.0 †	3.0	0.0 †	42.4	0.0 †	39.3	0.1 *	0.9 *	0.9 *	0.0 †	1.3 *	34.4
1.00 to under 1.25	647	320	46.1	44.0	0.3 *	1.2 *	0.0 †	18.7	0.4 *	16.8	0.0 †	4.1 *	3.5 *	0.6 *	1.4 *	31.8
1.25 to under 1.50	735	354	59.8	57.4	0.3 *	2.1 *	0.0 †	13.0	0.0 †	10.3	0.0 †	3.9 *	3.6 *	0.0 †	0.0 †	26.0
1.50 to under 1.75	1,115	526	75.2	73.8	0.1 *	1.0 *	0.2 *	7.0	0.2 *	5.5	0.0 †	3.5 *	3.3 *	0.2 *	0.2 *	15.6
1.75 to under 2.00	1,654	781	82.0	80.1	0.1 *	0.9 *	0.0 †	3.7	0.1 *	2.4	0.0 †	3.2	2.3	0.8 *	0.7 *	12.4
2.00 and above	3,484	1,601	91.0	90.0	0.0 †	0.6 *	0.0 †	1.4	0.0 †	0.7	0.0 †	2.1	1.7 *	0.3 *	0.4 *	6.1
5-17 years and																
Under 0.50	1,395	719	14.4	9.9	0.0 †	4.3	0.3 *	59.0	0.2 *	53.7	0.6 *	0.1 *	0.1 *	0.0 †	0.9 *	30.1
0.50 to under 1.00	2,546	1,337	27.3	23.7	0.0 †	2.9	0.0 †	36.0	0.0 †	33.0	0.1 *	2.0 *	1.4 *	0.6 *	0.5 *	37.7
1.00 to under 1.25	1,571	814	53.2	51.6	0.0 †	1.6 *	0.0 †	14.3	0.0 †	12.5	0.2 *	1.7 *	1.7 *	0.0 †	0.4 *	32.0
1.25 to under 1.50	1,809	910	66.4	65.0	0.0 †	1.5 *	0.0 †	8.2	0.0 †	6.5	0.2 *	1.7 *	1.7 *	0.0 †	1.0 *	24.2
1.50 to under 1.75	3,250	1,598	79.1	77.6	0.2 *	0.9 *	0.0 †	5.4	0.2 *	4.1	0.0 †	3.1	2.7 *	0.3 *	0.2 *	13.7
1.75 to under 2.00	4,444	2,160	88.1	86.9	0.0	0.4 *	0.0 †	1.3	0.0 †	0.8	0.0 †	2.3	1.5	0.7 *	0.6 *	8.9
2.00 and above	8,131	3,895	92.4	90.7	0.0	0.5	0.0 †	1.0	0.0	0.5	0.0 †	2.4	1.2	1.2	0.4	5.4

TABLE 3. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Sociodemographic Status, by Gender: United States, 1989

					Private insurance and			Medicare and/or Medicaid				Military				
	Population (1,000s)	Sample Size	With Private %	With[1] Private Only %	Medi-[1] care Only %	Medi-[1] caid Only %	Medicare & Medicaid[1] Only %	With Either %	Medi-[1] care Only %	Medi-[1] caid Only %	Medicare & Medicaid[1] Only %	With Military %	Military Only %	Military & Private Only %	Undefined[1] Plans Only %	Not Insured %
All Girls	31,252	15,484	71.0	69.5	0.0 *	1.0	0.0	12.2	0.1 *	10.9	0.0 *	2.0	1.6	0.4	0.5	15.7
Age																
0-4 years	9,162	4,539	66.1	64.9	0.1 *	1.0	0.0 †	15.5	0.2 *	14.2	0.0 †	2.3	2.1	0.1 *	0.6	16.7
5-17 years	22,090	10,945	73.0	71.5	0.0	1.0	0.0	10.8	0.1 *	9.5	0.1 *	1.9	1.4	0.5	0.5	15.3
Race																
White	25,141	12,075	75.3	74.0	0.0	0.9	0.0 †	8.6	0.1 *	7.5	0.0	2.0	1.6	0.3	0.5	15.0
Black	4,907	2,842	51.6	49.3	0.0 †	1.7	0.1 *	28.8	0.4 *	26.5	0.1 *	2.3	1.9	0.4 *	0.8	18.7
Other	1,204	567	60.8	58.7	0.5 *	0.7 *	0.0 †	19.7	0.0 †	18.1	0.5 *	1.4 *	0.5 *	1.0 *	0.9 *	19.3
Ethnicity																
Hispanic	3,990	1,870	46.4	45.0	0.0	1.0	0.1 *	18.8	0.2 *	17.4	0.2 *	1.7 *	1.3 *	0.3 *	0.6	33.8
Non-Hispanic	27,262	13,614	74.6	73.1	0.0	1.0	0.3	11.2	0.1 *	9.9	0.0 *	2.1	1.7	0.4	0.3	13.1
Family Income																
Under $5,000	1,394	753	15.3	12.1	0.0 †	3.2	0.0 †	61.5	0.2 *	57.3	0.6 *	1.1 *	0.7 *	0.0 †	0.8 *	24.8
$5,000-$6,999	1,168	584	17.7	12.2	0.0 †	5.0 *	0.0 †	55.2	0.0 †	49.7	0.3 *	1.5 *	0.8 *	0.5 *	0.3 *	30.9
$7,000-$9,999	1,606	862	22.0	18.7	0.0 †	3.3	0.0 †	50.2	0.5 *	46.4	0.0 †	1.1 *	1.1 *	0.0 †	0.7 *	29.2
$10,000-$14,999	3,036	1,555	37.8	36.1	0.0 †	1.4	0.0 †	22.0	0.1 *	20.4	0.0	2.2	1.8 *	0.4 *	1.2	38.6
$15,000-$19,999	3,269	1,632	60.6	58.7	0.0 †	1.7	0.0 †	10.3	0.1 *	8.4	0.0 †	3.2	2.9	0.2 *	1.0 *	27.0
$20,000-$24,999	2,604	1,286	73.4	72.2	0.0	1.0 *	0.0 †	6.5	0.3 *	5.1	0.0 †	3.5	3.3	0.1 *	0.7 *	17.1
$25,000-$34,999	6,187	3,020	84.9	84.3	0.0	0.3 *	0.0	2.7	0.1 *	2.2	0.0 †	1.9	1.7	0.2 *	0.4	10.7
$35,000-$49,999	6,549	3,189	90.7	89.6	0.0 †	0.3 *	0.0 †	1.9	0.1 *	1.5	0.0	2.2	1.4	0.8	0.3 *	6.0
$50,000 or more	5,440	2,603	95.2	94.5	0.2 *	0.1 *	0.0 †	0.8	0.1 *	0.4 *	0.0 †	1.2	0.8	0.4 *	0.1 *	3.4
Poverty Level																
Under 0.50	2,243	1,185	13.4	9.6	0.0 †	3.8	0.0 †	61.2	0.4 *	56.4	0.5 *	0.9 *	0.7 *	0.0 †	0.5 *	28.0
0.50 to under 1.00	3,712	1,942	25.8	23.0	0.0 †	2.5	0.0 †	38.2	0.1 *	35.5	0.0 †	1.4	1.1 *	0.3 *	1.0	36.4
1.00 to under 1.25	2,258	1,173	53.6	51.3	0.2 *	2.0	0.0 †	15.5	0.2 *	13.1	0.0 †	3.1 *	2.8 *	0.2 *	0.6 *	29.6
1.25 to under 1.50	2,212	1,105	62.9	61.6	0.1 *	1.0 *	0.0 †	8.0	0.0 †	6.7	0.0	2.8 *	2.4 *	0.2 *	1.5	26.3
1.50 to under 1.75	4,229	2,080	80.1	79.1	0.0	0.8	0.1 *	5.1	0.3 *	3.9	0.0	2.5	2.3	0.1 *	0.4 *	13.0
1.75 to under 2.00	5,639	2,751	86.7	85.8	0.1 *	0.4 *	0.0 †	2.6	0.2 *	1.8	0.0 †	2.0	1.5	0.5 *	0.3 *	9.5
2.00 and above	10,959	5,248	91.7	90.9	0.0 †	0.2 *	0.0 †	1.3	0.0	1.0	0.0 †	1.9	1.4	0.6	0.4	5.5
Age and Poverty Level																
0-4 years and																
Under 0.50	757	395	9.1	7.0	0.0 †	2.1 *	0.0 †	67.1	0.0 †	65.0	0.0 †	1.7 *	1.7 *	0.0 †	1.1 *	23.2
0.50 to under 1.00	1,171	605	20.1	18.2	0.0 †	1.9	0.0 †	42.6	0.1 *	40.4	0.0 †	1.7 *	1.5 *	0.1 *	1.5 *	36.2
1.00 to under 1.25	701	355	45.2	41.4	0.3 *	2.9 *	0.0 †	22.4	0.0 †	19.0	0.0 †	4.7 *	3.8 *	0.6 *	1.0 *	30.7
1.25 to under 1.50	574	294	55.6	53.5	0.3 *	1.8 *	0.0 †	13.3	0.0 †	11.2	0.0 †	3.1 *	3.1 *	0.0 †	1.4 *	28.6
1.50 to under 1.75	1,090	535	77.2	75.8	0.0 †	1.4 *	0.0 †	5.3	0.8 *	3.1	0.0 †	2.4	2.4	0.0 †	0.5 *	16.0
1.75 to under 2.00	1,503	748	81.7	81.1	0.1 *	0.3 *	0.0 †	4.0	0.1 *	3.5	0.0 †	2.6 *	2.3 *	0.2 *	0.2 *	12.1
2.00 and above	3,365	1,607	90.6	90.3	0.0 †	0.2 *	0.0 †	1.9	0.1 *	1.6	0.0 †	1.8	1.7	0.1 *	0.2 *	5.8
5-17 years &																
Under 0.50	1,485	790	15.6	11.0	0.0 †	4.6 *	0.0 †	58.2	0.5 *	52.0	0.8 *	0.5 *	0.1 *	0.0 †	0.2 *	30.4
0.50 to under 1.00	2,541	1,337	28.4	25.2	0.0 †	2.8	0.0 †	36.2	0.1 *	33.3	0.0 †	1.3 *	1.0 *	0.3 *	0.8 *	36.5
1.00 to under 1.25	1,557	818	57.4	55.7	0.1 *	1.6 *	0.0 †	12.4	0.3 *	10.5	0.0 †	2.4 *	2.4 *	0.0 †	0.4 *	29.0
1.25 to under 1.50	1,638	811	65.5	64.4	0.1 *	0.7 *	0.0 †	6.1	0.0 †	5.1	0.1 *	2.7 *	2.1 *	0.3 *	1.5 *	25.5
1.50 to under 1.75	3,139	1,545	81.1	80.2	0.1 *	0.6 *	0.1 *	5.0	0.1 *	4.1	0.0	2.5	2.3	0.2 *	0.4 *	11.9
1.75 to under 2.00	4,136	2,003	88.5	87.4	0.1 *	0.4 *	0.0 †	2.0	0.2 *	1.2	0.0 †	1.8	1.2	0.6 *	0.3 *	8.5
2.00 and above	7,595	3,641	92.2	91.2	0.0 †	0.2 *	0.0 †	1.0	0.0 †	0.8	0.0 †	2.0	1.3	0.8	0.4 *	5.4

Source: National Health Interview Survey (author's tabulations from public use tapes).
Note: Standard errors for estimates appear in Appendix TABLE B-3.
[1] Excluding military.
* Estimate has low statistical reliability (relative standard error > 30%).
† Estimate is exactly 0 or standard error is indeterminate.

TABLE 4. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and: Medicare Only[1] (%)	Private insurance and: Medicaid Only[1] (%)	Private insurance and: Medicare & Medicaid Only[1] (%)	Medicare and/or Medicaid: With Either (%)	Medicare and/or Medicaid: Medicare Only[1] (%)	Medicare and/or Medicaid: Medicaid Only[1] (%)	Medicare and/or Medicaid: Medicare & Medicaid Only[1] (%)	Military: With Military (%)	Military: Military Only (%)	Military: Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Total	64,005	31,524	71.2	69.6	0.1 *	1.1	0.0 *	12.0	0.1	10.6	0.1 *	2.2	1.6	0.5	0.6	15.8
Age																
0-4 years	18,769	9,146	66.7	65.2	0.1 *	1.1	0.0 *	15.1	0.1 *	13.7	0.0 *	2.4	2.1	0.2	0.7	16.7
5-17 years	45,236	22,378	73.1	71.3	0.0 *	1.1	0.0 *	10.7	0.1 *	9.3	0.1 *	2.1	1.5	0.6	0.5	15.4
Health Status																
Excellent	33,747	16,494	77.3	75.9	0.1 *	0.9	0.0 †	7.9	0.1 *	6.9	0.0 *	2.3	1.8	0.5	0.5	13.5
Very good	17,052	8,406	71.0	69.4	0.0 *	1.1	0.0 *	12.1	0.1 *	10.7	0.1 *	1.9	1.6	0.3	0.6	16.0
Good	10,902	5,495	56.5	54.0	0.0 *	1.7	0.0 *	21.2	0.2 *	19.2	0.0 *	2.2	1.4	0.7	0.8	21.9
Fair	1,472	727	50.2	47.7	0.0 †	2.2	0.0 †	30.7	0.2 *	27.8	0.3 *	1.6	1.2 *	0.3 *	0.7 *	19.5
Poor	190	92	33.2	32.2	0.0 †	1.0 *	0.0 †	36.6	0.0 †	35.5	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	31.3
Unknown	643	310	68.2	67.0	0.3 *	0.9 *	0.0 †	13.5	0.0 †	12.3	0.0 †	1.6 *	1.6 *	0.0 †	0.2 *	17.8
Major Activity																
Unable to perform major activity	346	171	53.9	49.5	0.0 †	4.4 *	0.0 †	32.1	0.6 *	25.9	0.0 †	1.8 *	0.6 *	0.0 †	0.7 *	17.1
Limited in amount/kind of major activity	2,097	1,032	58.2	54.3	0.3 *	3.1	0.2 *	26.3	0.1 *	22.3	0.2 *	1.6	1.1 *	0.3 *	0.2 *	17.8
Limited in other activity	994	497	70.4	68.1	0.0 †	1.4 *	0.2 *	17.8	0.0 †	16.3	0.0 †	2.1 *	1.3 *	0.8 *	0.6 *	11.4
Not limited in activity	60,567	29,824	71.8	70.2	0.0 *	1.0	0.0 *	11.3	0.1 *	10.0	0.1 *	2.2	1.7	0.5	0.6	15.8
Basic Life Activities																
Needs help in self care (ADL)-ages 5-17	194	89	46.6	38.3	0.0 †	4.8 *	1.5 *	49.9	0.0 †	43.7	0.0 †	2.0 *	0.0 †	2.0 *	0.0 †	9.7 *
Not limited in basic life activities	63,811	31,435	71.3	69.7	0.1 *	1.1	0.0 *	11.8	0.1	10.5	0.1 *	2.2	1.7	0.5	0.6	15.8
Major Activity & Health Status																
Unable to perform major activity &																
Excellent	46	22	76.4	76.4	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	4.7 *	4.7 *	0.0 †	0.0 †	18.9 *
Very good	59	28	42.7	38.8	0.0 †	3.9 *	0.0 †	28.3 *	0.0 †	24.4 *	0.0 †	0.0 †	0.0 †	0.0 †	4.0 *	28.9 *
Good	82	42	63.0	52.3	0.0 †	10.7 *	0.0 †	32.5	0.0 †	19.1 *	0.0 †	2.6 *	0.0 †	0.0 †	0.0 †	15.2 *
Fair	107	54	53.2	51.2	0.0 †	2.1 *	0.0 †	38.3	1.8 *	32.5	0.0 †	1.9 *	0.0 †	0.0 †	0.0 †	10.5 *
Poor	44	21	32.1 *	27.6 *	0.0 †	4.6 *	0.0 †	49.7	0.0 †	45.1	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	22.8 *
Unknown	9 *	4	42.5 *	42.5 *	0.0 †	0.0 †	0.0 †	57.5 *	0.0 †	57.5 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Limited in amount/kind of major activity &																
Excellent	509	252	63.5	57.3	0.4 *	5.4 *	0.0 †	22.2	0.0 †	15.9	0.0 †	2.7 *	1.9 *	0.4 *	0.0 †	18.3
Very good	504	241	63.6	61.4	0.0 †	1.6 *	0.6 *	17.2	0.0 †	14.6	0.4 *	1.6 *	1.6 *	0.0 †	0.4 *	19.4
Good	729	359	56.5	52.3	0.5 *	2.6 *	0.3 *	31.5	0.3 *	27.6	0.0 †	1.4 *	0.5 *	0.7 *	0.3 *	14.8
Fair	269	138	53.2	50.5	0.0 †	2.7 *	0.0 †	31.5	0.0 †	28.3	0.5 *	0.8 *	0.8 *	0.0 †	0.0 †	17.3
Poor	73	34	19.4 *	19.4 *	0.0 †	0.0 †	0.0 †	42.5	0.0 †	42.5	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	38.1
Unknown	14 *	8	58.6	43.1 *	0.0 †	15.6 *	0.0 †	49.3 *	0.0 †	33.7 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	7.6 *
Limited in other activity &																
Excellent	223	107	76.2	74.4	0.0 †	1.8 *	0.0 †	10.7 *	0.0 †	8.9 *	0.0 †	2.2 *	2.2 *	0.0 †	0.8 *	11.9 *
Very good	331	165	82.7	81.4	0.0 †	0.0 †	0.6 *	10.2	0.0 †	9.6	0.0 †	1.3 *	0.7 *	0.7 *	1.2 *	5.9 *
Good	337	170	61.9	59.2	0.0 †	2.2 *	0.0 †	25.3	0.0 †	23.1	0.0 †	1.4 *	0.9 *	0.5 *	0.0 †	14.0
Fair	83	42	58.7	51.2	0.0 †	2.4 *	0.0 †	28.0	0.0 †	25.5	0.0 †	7.9 *	2.8 *	5.1 *	0.0 †	13.0 *
Poor	16 *	9	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	38.2 *	0.0 †	38.2 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	61.8
Unknown	5 *	4	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	100.0 †	0.0 †	100.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †

TABLE 4. Type of Health Insurance Coverage Among Children Aged 0 to 17, by Disability and Health Status, by Gender: United States, 1989

	Population (1,000s)	Sample Size	With Private (%)	With[1] Private Only (%)	Private insurance and Medi-care[1] Only (%)	Medi-caid[1] Only (%)	Medicare &[1] Medicaid Only (%)	Medicare and/or Medicaid With Either (%)	Medi-care[1] Only (%)	Medi-caid[1] Only (%)	Medicare &[1] Medicaid Only (%)	Military With Military (%)	Military Only (%)	Military & Private Only (%)	Undefined[1] Plans Only (%)	Not Insured (%)
Not limited in activity &																
Excellent	32,969	16,113	77.5	76.2	0.0 *	0.8	0.0 †	7.7	0.1 *	6.7	0.0 *	2.3	1.8	0.5	0.5	13.4
Very good	16,159	7,972	71.1	69.6	0.1 *	1.1	0.0 *	11.9	0.1 *	10.5	0.1 *	1.9	1.6	0.3	0.5	16.1
Good	9,755	4,924	56.3	54.0	0.0 *	1.6	0.0 †	20.2	0.2 *	18.4	0.0 *	2.3	1.5	0.7	0.8	22.7
Fair	1,013	493	48.3	46.2	0.0 †	2.1 *	0.0 †	29.9	0.1 *	27.4	0.4 *	1.3 *	1.3 *	0.0 †	1.0 *	21.5
Poor	58	28	60.8	60.8	0.0 †	0.0 †	0.0 †	18.6 *	0.0 †	18.6 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	20.7 *
Unknown	614	294	69.4	68.5	0.3 *	0.6 *	0.0 †	11.2	0.0 †	10.3	0.0 †	1.6 *	1.6 *	0.0 †	0.2 *	18.4
All Boys	32,753	16,040	71.4	69.6	0.1 *	1.2	0.0 *	11.7	0.1 *	10.3	0.1 *	2.3	1.7	0.6	0.6	15.9
Age																
0-4 years	9,607	4,607	67.2	65.6	0.1 *	1.3	0.0 *	14.7	0.1 *	13.1	0.1 *	2.4	2.0	0.3	0.7	16.7
5-17 years	23,146	11,423	73.2	71.3	0.1 *	1.2	0.0 *	10.5	0.1 *	9.1	0.1 *	2.2	1.5	0.7	0.5	15.6
Health Status																
Excellent	17,509	8,528	77.4	75.8	0.1 *	0.8	0.0 †	7.8	0.0 *	6.8	0.0 *	2.5	1.8	0.7	0.5	13.4
Very good	8,576	4,204	70.9	69.1	0.0 *	1.3	0.0 *	11.9	0.1 *	10.2	0.1 *	2.1	1.7	0.4 *	0.6	16.3
Good	5,524	2,759	57.9	55.1	0.1 *	1.9	0.0 *	20.5	0.1 *	18.2	0.1 *	2.0	1.2	0.7 *	0.6	21.9
Fair	740	362	45.7	42.6	0.0 †	2.8 *	0.0 †	33.3	0.0 †	30.0	0.2 *	2.0 *	1.5 *	0.2 *	1.2 *	21.2
Poor	91	44	30.3	28.2	0.0 †	2.2 *	0.0 †	37.5	0.0 †	35.3	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	34.3
Unknown	313	143	64.5	64.5	0.0 †	0.0 †	0.0 †	13.3	0.0 †	13.3	0.0 †	1.9 *	1.9 *	0.0 †	0.0 †	20.2
Major Activity																
Unable to perform major activity	201	101	51.8	47.9	0.0 †	3.9 *	0.0 †	31.1	0.0 †	25.1	0.0 †	3.2 *	1.1 *	0.0 †	1.2 *	18.7
Limited in amount/kind of major activity	1,319	641	59.9	55.4	0.4 *	3.3	0.1 *	24.8	0.0 †	20.5	0.3 *	1.8 *	1.2 *	0.5 *	0.1 *	18.0
Limited in other activity	580	289	68.8	65.8	0.0 †	1.7 *	0.3 *	19.3	0.0 †	17.3	0.0 †	2.2 *	1.2 *	1.0 *	0.6 *	12.1
Not limited in activity	30,653	15,009	72.1	70.4	0.0 *	1.1	0.0 *	10.9	0.1 *	9.6	0.1 *	2.3	1.7	0.6	0.6	15.8
Basic Life Activities																
Needs help in self care (ADL)-ages 5-17	130	56	38.5	28.4	0.0 †	7.1 *	0.0 †	57.0	0.0 †	49.9	0.0 †	3.0 *	0.0 †	3.0 *	0.0 †	11.6 *
Not limited in basic life activities	32,623	15,984	71.6	69.7	0.1 *	1.2	0.0 *	11.5	0.1 *	10.1	0.1 *	2.3	1.7	0.6	0.6	15.9
Major Activity & Health Status																
Unable to perform major activity &																
Excellent	30 *	14	78.1	78.1	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	7.3 *	7.3 *	0.0 †	0.0 †	14.6 *
Very good	39	19	40.8	40.8	0.0 †	0.0 †	0.0 †	10.4 *	0.0 †	10.4 *	0.0 †	0.0 †	0.0 †	0.0 †	5.9 *	42.9 *
Good	45	23	63.5	55.5	0.0 †	8.0 *	0.0 †	27.7 *	0.0 †	14.9 *	0.0 †	4.8 *	0.0 †	0.0 †	0.0 †	16.8 *
Fair	62	33	45.6	41.9	0.0 †	3.6 *	0.0 †	46.7	0.0 †	39.9	0.0 †	3.3 *	0.0 †	0.0 †	0.0 †	11.3 *
Poor	18 *	9	33.7 *	22.4 *	0.0 †	11.3 *	0.0 †	66.7	0.0 †	55.4	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	10.9 *
Unknown	7 *	3	29.0 *	29.0 *	0.0 †	0.0 †	0.0 †	71.0 *	0.0 †	71.0 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †
Limited in amount/kind of major activity &																
Excellent	364	183	68.0	61.3	0.5 *	5.7 *	0.0 †	18.7	0.0 †	12.5	0.0 †	1.6 *	1.1 *	0.5 *	0.0 †	18.4
Very good	303	143	63.9	62.5	0.0 †	1.4 *	0.0 †	15.7	0.0 †	13.6	0.7 *	1.9 *	1.9 *	0.0 †	0.0 †	19.9
Good	462	221	59.0	53.8	0.7 *	2.6 *	0.4 *	30.1	0.0 †	25.9	0.0 †	2.2 *	0.8 *	1.0 *	0.4 *	13.8
Fair	149	74	47.3	42.5	0.0 †	4.8 *	0.0 †	34.9	0.0 †	29.2	0.8 *	1.4 *	1.4 *	0.0 †	0.0 †	21.3
Poor	34	15	13.5 *	13.5 *	0.0 †	0.0 †	0.0 †	46.0 *	0.0 †	46.0 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	40.5 *
Unknown	8 *	5	23.6 *	23.6 *	0.0 †	0.0 †	0.0 †	62.3 *	0.0 †	62.3 *	0.0 †	0.0 †	0.0 †	0.0 †	0.0 †	14.1 *